Inside

GATEWAY TO INDUSTRY: in the first of a four-part series on links between higher education and manufacturing, John O'Leary looks at the current state of play (page 9)

Cracks in the tablets of stone? **LAW** is enshrined in language but not always in clearly graven letters. Bernard Jackson considers how contemporary semiotics has affected our perceptions of legal language (page 11)

TATLIN'S TOWER, his never-built monument to the Comintern, would unquestionably have been one of the architectural wonders of the world, out-Eiffeling Eiffel by a full hundred metres. Norbert Lynton puts the Russian artist's dream in perspective (page 14)

"Culture takes its inspiration from outcasts": the conventions dictate that these outcasts are haunted men; women are seen as serenely untroubled domesticators. But the stereotype is under attack. Tony Tanner reviews Nina Auerbach's **ROMANTIC IMPRISONMENT**, a new study that reveals startling qualities in some familiar fictional heroines (page 15)

Naming, musical structure, IQ, cognition and language, psychological tests, neuroscience and more: a four-page section on **PSYCHOLOGY BOOKS** (pages 19–22)

Home news	1–6
Patrick Nuttgens	2
Letters to the editor	2
antithesis	3
Don's Diary (A. H. T. Levi)	4
Union View (APT)	5
Party Line (Ian Wrigglesworth)	6
Overseas news	7–8
Articles	9–14
Noticeboard	12
Column (Pauline Stafford)	14
Books	15–22
Psychology books	19–22
Classified advertising	23–27

NEXT WEEK

Gateway to industry II
University reform, 18th-century style
Adam Kuper on Victor Turner
Law books

THE TIMES
TIMES PAST
HIGHER EDUCATION SUPPLEMENT
Priory House, St John's Lane, London EC1M 4BX. Telephone 01-253 3000

The overseas question and market forces

The one good thing that can be said about the arbitrary and short-sighted imposition of "full-cost" fees for overseas students six years ago is that it has forced higher education to take overseas students seriously. This is not an insignificant compliment. Before 1979, despite earlier rumblings of little-Englandism going back as far as Mr Anthony Crosland's ill-judged decision 20 years ago to charge overseas students higher fees than home students, higher education took overseas students for granted. Their presence seemed to discharge a post-imperial obligation and to confirm the international claims of the university. The question "why overseas students?" seemed to have such a self-evident, if rather soggy and even sentimental, answer that it was never properly asked.

That pre-1979 world has been entirely lost. But it is unlikely that Mr Mark Carlisle who as Secretary of State for Education and Science imposed "full cost" fees on overseas students or his chief lieutenant Dr Rhodes Boyson realized the significance of their decision. After all discrimination against overseas students had been official policy since the mid-1960s; the newly elected Conservative Government had a fetish-like obsession with free markets; and the Treasury was demanding cuts in higher education expenditure which could be provided fairly painlessly by charging

> **The case for overseas students has had to be reconsidered from its foundations up**

overseas students more for their tuition.

In fact this mindless decision set off reverberations that show little sign of dying away. First, "full cost" fees have altered radically the political economy of higher education itself, not just its economy but its politics too. It is not simply that the supplementary income produced by overseas students provides many institutions with that vital margin of free money they need to stay in business; in far too many cases managing higher education today has been reduced to manipulating cash flows.

It is also that the application of free market principles cannot be contained within a cordoned-off corner of higher education labelled "overseas students". Already two classes of student have been produced – home students whose number is strictly controlled and whose presence in higher education is justified within the old mixed-economy tradition of civic advancement and individual achievement, and oversees students whose number is uncontrolled and who are in Britain as paying customers. The consequent tension is a source of inexorable instability. Already the more famous institutions are charging more than the minimum fees for overseas students; soon the less famous will try to undercut these standard fees if the University Grants Committee, the Department of Education and Science, and the local authorities overcome their timid distaste for market forces. Again, administrative and financial instability is inevitable. Finally, of course, the whole question of tuition fees for home as well as overseas students will inevitably be re-opened; the odds-on result will be their outright abolition with uncomfortable consequences for institutions. To borrow the lines of an old campaigner, "you ain't seen nothing yet!"

Second, the imposition of "full cost" fees has disturbed Britain's international relations to a degree that the DES in its parochial innocence back in 1979 could never have imagined. Again it was not simply the Malaysias, Hong Kongs and Cypruses which were particularly dependent on Britain for meeting their higher education needs. It was also that the 1979 decision seemed to too many of Britain's overseas friends evidence of an alarming trend towards little-Englandism, a trend that has been wretchedly confirmed by the xenophobia and racism that seem to have become endemic in 1980s Britain.

As a result, the Government has not been able to maintain its original hard-line free-market position on overseas students' fees. The political damage was too formidable. The "full cost" principle of courses has been affirmed. But the Foreign and Commonwealth Office has spent the last five years struggling to repair the worst of the damage inflicted on Britain's international reputation and overseas trade by the 1979 decision. The FCO's ameliorative approach has been to devise scholarship and aid programmes, the most prominent of which was the so-called Pym package announced in February 1983. This approach has achieved its political goal – to defuse overseas, and especially Commonwealth, criticism of Britain. But if anything it has made it even more difficult to recover a coherent policy for overseas students.

Third, "full cost" fees shattered the old consensus. The traditional arguments for overseas students were swept aside. They were exposed as an ineffectual defence not just in political but in intellectual terms too. Often these old arguments had a retrospective quality that failed to carry conviction in the cold climate of the new Conservatism, or had grown blunt through long disuse. Harsher critics denied that proper arguments had ever been made for overseas students; instead higher education had relied on a semi-conscious prejudice in favour of overseas students based on little more than their historic presence in Britain.

Since 1979 the supporters of overseas students have been forced to devise new kinds of arguments – tough-minded, sharp-edged and thoroughly modern. These arguments have had to reflect; not that mixture of duty and guilt which characterized the Imperial after-glow, but a pragmatic appreciation of both the needs and the obligations of a medium-sized northern European nation which is crucially dependent on overseas trade and advanced technology and which, despite economic disappointment, is still a formidable centre of world science and the home of one of mankind's most powerful cultural traditions. So the case for overseas students has had to be reconstructed from its foundations up.

It has been a bruising business, but necessary. By organizing two Ditchley Park conferences, the most recent in March, the Overseas Students Trust has made a notable contribution to the development of a new agenda. The eventual outcome is likely to be a more solid and credible justification of overseas students that cannot simply be swept away as happened in 1979. At last overseas students are being taken seriously rather than for granted.

Higher education has a central role in rebuilding the case for overseas students, which so far it has been reluctant to play. There have been two reasons for this reticence. First, because of the cuts higher education has a vested interest in high fees for overseas students. Universities, polytechnics and colleges for selfish but inescapable reasons have been reluctant to agitate too strongly for any change of policy on overseas students that might lead to a loss of irreplaceable income. Second, higher education's self-confidence has taken such a battering in the last five years that it has chosen to rely on other than academic reasons for overseas students because they seemed more palatable politically. So the case has been made in terms of international trade, aid to the third world, and cultural diplomacy.

Both reasons are beginning to lose their force. More and more people in higher education have come to realize that overseas students cannot be treated as a nice little self-contained money-spinning subsidiary. As a result they appreciate the need to build back the case for overseas students into the larger case for higher education. Because arguments about trade, aid and diplomacy are little help here, proper academic arguments for overseas students are having to be developed.

In fact, there is no shortage of such arguments. What has been lacking up to now is higher education's confidence to deploy them. First, the presence of overseas students fosters an internationalist outlook among British students. Second, many subjects – languages, area studies, and so on – cannot profitably be taught in a monolingual, mono-ethnic, monocultural environment. Third, the presence of overseas students helps to test the validity and the quality of British higher education against world standards. Fourth, they introduce different and challenging intellectual traditions from which we have much to learn. Fifth, as research students they help with research that serves our national interests. Sixth, they enable rare subjects to be taught in economically and intellectually viable groups. This list of academic reasons for welcoming overseas students to Britain can be elaborated and extended.

> **As research students they help with research that serves our national interests**

None of these reasons of course answers the crucial questions for overseas students policy – How many? From what countries? In what subjects? Who pays? But collectively they do begin to establish the outlines of a higher education view distinguishable from the "national interest" as determined by the FCO or the Department of Trade and Industry. At present just over 5 per cent of students are from overseas, many fewer than in 1979 but a stable or gently rising share. Most people in higher education would prefer a proportion twice as great. They need to explain why, clearly and cogently.

The origins of overseas students have become a jungle – students from rich countries, or rich ones from poor countries, are recruited in a "full cost" free-for-all; students from the third world are subsidized by aid programmes; and most European students are excluded because under Common Market rules they count as "home" students. This pattern makes little academic sense, however utilitarian it may be in financial terms. On subject balance the "national interest" dictates students in science and technology; the "academic interest" students in all subjects, especially perhaps in the culturally-inward arts and social sciences. As for subsidy of overseas students higher education should be sufficiently self-confident to insist that there is an academic dimension to this question, alongside the aid, trade and diplomatic dimension, which is as truly in the national interest. But to be believed, higher education must first believe.

© TIMES NEWSPAPERS LIMITED, 1986

Published by Times Newspapers Ltd., P.O. Box 7, 200 Gray's Inn Road, London WC1X 8EZ. Editor. Typesetting by ComputerGraphics Ltd, 37-45 Cowper St., London EC1, and printing by Northampton Mercury Co. Ltd. Upper Mounts, Northampton NN1 3HR. Friday, April 4, 1986. Registered as a newspaper at the Post Office. ISSN 0049-3929.

Laurie Ta

That's fine everybody. Now, Professor Lapping, I said "rest listen for my handclap. That's lie on the floor where you are *Relax* Good.

Well, how did we get on in improvisation? Not too bad, *Not too bad at all.* What we trying to do, as you'll recall, simulate a normal conversation full marks to Doctor Quintock gave me a very reasonable minutes on the respective chances Liverpool and Everton in the forthcoming championship race. One slight though, Doctor Quintock. It's Rush, not *Bruce.* Only a detail, can be a giveaway.

And congratulations to all everyone on general circulating ability. Apart from some slight difficulties at the beginning of the session when Professor Moat, Doctor Rogers and Doctor Trellis went into a most unfortunate huddle for nearly 10 minutes, there was a welcome readiness to move around the room, and what's more to move at that slightly increased pace which does so much to give the impression of normal walking.

While we're on *general deportment – Professor Lapping.* Do try and relax. You *may* find it easier if you uncross your arms. *That's it* – yes, on the subject of general deportment, there are *still one or two* problems with *listening.* After asking a question – something like Doctor Bugle's interesting offering, "What sort of chance do you think the SDP have at Fulham?" – you should at least give the impression of listening to the answer. All that's needed is the occasional nod or grunt of agreement, and perhaps a slight inclination of the head. But do try and get away from the traditional seminar posture of staring blankly out of the nearest window. And also remember – and more black marks here, I'm afraid, for Professor Lapping – that it is *not* normal in an informal conversation to invite your partner to take down a list of references *OK?*

Vocabulary was also much improved. Only 15 "arguablys, a mere dozen 'in a sense's and no more than half an "epistemological" – a slip of the tongue I think Professor Drawbridge? *I thought so.* Incidentally, do be careful when describing some of the more esoteric aspects of university life. The word "reader" for example, often causes problems. "internal examiner" is frequently misunderstood, and as Doctor Piercemuller should have realized, there is almost no way in which the term "sabbatical" can be made completely explicable to outsiders.

That's about it then. Let's recap on what we've learned this week. **Sitting up straight. Talking and listening. Moving at a reasonable pace. Smiling. Keeping out of hallways. Saying goodbye and hello. Ordering a round of drinks.** Now, there's nothing else to do but go home and have a good night's sleep, then in the morning – *remember* – not too much corduroy, check the length of your trousers, bring in one copy of each of your books for the display stand, and think "normal". That way we can all have a simply super Open Day. *Class* – wait for the handclap Professor Lapping – *Dismiss.*

Fate of the voluntary colleges, 14

The Times Higher Education Supplement

April 11, 1986 No 701 Price 65p

A fighting force for adults

by Felicity Jones

Plans to harness the skills of a disorganized army of educational guidance workers and turn them into a national and coordinated fighting force have been put forward in the first major report by the Unit for the Development of Adult Continuing Education.

The report which stems from an 18-month study and consultation exercise carried out at the request of the Department of Education and Science calls for a two tier system of collaborative networks of existing agencies involved in guidance for adults.

It argues that individuals and providers will benefit from a nationally available service built upon "the good, but patchy and uncoordinated work of many existing agencies", including educational advice services, libraries, careers services, jobcentres and training providers.

At the local level, UDACE envisages the setting up of formal collaborative networks in which careers, library and educational guidance services will act as core agencies to develop them.

Local education authorities at an estimated cost of up to £80,000 should fund local educational guidance units to support and service the network and run direct provision on a pilot basis.

At a national level the report recommends the establishment of a parallel unit to cover England and Wales. This would be funded by the DES, Welsh Office and the Department of Employment with an annual budget of £500,000 to support a small team of developmental staff. It would encourage good practice, sponsor training and provide a forum for all concerned in educational guidance.

Dr Donald Grattan, chairman of UDACE said that the report's recommendations were realistic and practical and did not call for large amounts of cash.

"We argue that both the 'customers' and the providers of education and training will get better value for money if a well organised and coherent service is available", he said.

He recognises that a successful new scheme will lead to increased demand for education and training but believes it to be in the national interest that more adults engage in learning.

The Challenge of Change: Developing Educational Guidance for Adults. (Full report £3, short report £1.50) from NIACE, 19b De Montfort Street, Leicester LE1 7GE.

Trying out the domino theory

Stirling University's rag committee investigated the domino theory last weekend, and claimed a British record with a total of 61,414 toppling dominoes in an unbroken line which took three days to erect in a local school gymnasium.

Double bid to soften blow of proposed NAB cuts

by John O'Leary

The Government is to make a two-pronged effort to reduce the level of cuts planned for polytechnics and colleges following strong criticism this week of the proposals for 1987–88 made by the secretariat of the National Advisory Body.

Civil servants will try to argue down the number of places to be lost in the latest NAB planning exercise at talks still to be arranged with the body's officials. And there are hopes that next year's advanced further education pool will be increased by more than the £23 million already signalled by Sir Keith Joseph, Secretary of State for Education and Science.

Although the eventual size of the pool hinges on the wider negotiations on local government spending, the Department of Education and Science will press for extra funds for public sector higher education. There is no likelihood of the full £23 million shortfall identified by the NAB being made up, but a further increase would allow a significant proportion of the 9,400 lost places to be restored.

Both Sir Keith and Mr George Walden, his under secretary and chairman of the NAB, stressed in the House of Commons that no decisions had been taken to cut places in polytechnics and colleges, deflecting the blame on to the NAB secretariat.

However, Opposition spokesmen insisted that they would not let the Government off the hook. Mr Neil Kinnock, the Labour leader, described the proposed cuts as the action of "a yob government" and Mr Giles Radice, the shadow education secretary, demanded a full Commons statement.

The plan, which will be discussed by the NAB board next week, would bring about one institutional closure, at Rose Bruford College of Speech and Drama, and a series of mergers. One involves an ambitious proposal to link Plymouth Polytechnic, the College of St Mark and St John, Rolle College and the Exeter College of Art and Design. A dozen other colleges would lose all advanced courses, but would survive on their non-advanced work.

The recommendation effectively to close Rose Bruford, at Sidcup, Kent, comes hard on the heels of a glowing report by Her Majesty's Inspectorate and just as merger negotiations with the City of London Polytechnic were nearing completion. Mr Jean-Norman Benedetti, the principal, said that all three courses in theatre arts and stage management were accepted as vocational and unique, but that the college was being penalised for being too small with 168 students.

Mr Christopher Ball, chairman of the NAB board, said of the plan as a whole: "I very much regret that it has been necessary to plan at this stage for a severe cut in student numbers but we have to do it if we are to maintain the quality of provision in the public sector. I hope that the Government will find the funds we need to enable us to reinstate the important parts of the provision which are at present to be sacrificed and to develop other badly-needed work."

Mr Peter Dawson, general secretary of the National Association of Teachers in Further and Higher Education, which revealed details of the proposals, blamed the Government for the cuts.

Details, page 5
Leader, back page

Poly director's challenge

by Karen Gold

The Government should cancel the cuts in places suggested by the National Advisory Body which reveal that its educational policy is in total disarray, the director of Oxford Polytechnic Dr Clive Booth said this week.

Dr Booth, a former HM Inspector and Department of Education and Science official, said at the conference of the Association of Polytechnic Administrators in Sunderland that the Government wants vocational courses, science, engineering and technology, yet has launched a major programme of cuts in the vocational sector of higher education.

The cumulative effect is that 30,000 fewer young people annually will benefit from applied higher education. The places are removed from the most cost-effective sector of higher education, despite the Government's policy of promoting cost-effectiveness.

He said: "Sir Keith Joseph boasts that spending per pupil in schools is the highest ever. In polytechnics spending per student is the lowest ever." Polytechnics were achieving staff:student ratios recommended by HM Inspectors – some of whom were now saying that these ratios were inadequate to preserve quality.

The Government could not pretend it was not responsible for the cuts, since the junior education minister Mr George Walden chaired the NAB committee overseeing them. Sir Keith talked about the need for intellectual rigour in education, but there was no rigour in his department's educational policies.

London accused of race bias

by David Jobbins

Some London University medical schools have operated admissions policies which discriminate against non-white and female students, two academics have claimed.

A study of students taking final examinations over a three-year period showed that some schools had a consistently smaller proportion of non-European students than others. Other schools appeared to have a lower proportion of women students than others.

The authors of the study, published in the latest issue of the journal, *Medical Education*, claim that their conclusions only confirm what minority group students have already suspected. They call for changes in procedures to right the injustice.

Dr J. G. Collier and Dr A. W. Burke believe that the correlation between the two lists of schools with relatively worse records is so strong that both are the result of an "orchestrated admissions policy."

The authors say: "It is unlikely to be by chance that the schools with the highest non-white intake also have the highest female intake, unless of course all non-whites were female, but if anything non-white students tend to be male."

They claim that at some schools admissions procedures are failing to provide equal opportunities as defined by the Race Relations Act.

They examined the final MB BS examination lists for the university over a three year period from 1982–1984 and classified students' names as European or other to approximate with racial origin. Similarly students were classed as male or female by their first names, taking advice on foreign names.

Westminster had the lowest proportion of apparently non-European stu-

continued on page 3

Scots universities oppose STEAC's proposals

by Olga Wojtas
Scottish Correspondent

Most of Scotland's eight universities are to oppose a single planning and funding body for Scottish tertiary education.

This is revealed in the response of the Standing Committee of the Scottish Universities to the report of the Scottish Tertiary Education Advisory Council, which proposed an overarching body to be responsible for the universities, central institutions and colleges of education.

The standing committee does not elaborate on which way each university has voted, but so far Aberdeen, Dundee, Heriot-Watt and St Andrews have issued statements opposing the single body, with only Strathclyde backing it.

Stirling is also expected to support the proposal, but Edinburgh is set to reject it, producing a majority against. It is still unclear what Glasgow's response will be: its principal, Sir Alwyn Williams, was a member of STEAC, and issued a personal statement supporting the single body, but Glasgow's original evidence to STEAC stressed that it wished to retain funding from the University Grants Committee.

The standing committee says there is general agreement that it is essential to maintain a buffer between them and the Government, and that the STEAC proposals would mean a radical revision of the basis of operation of the Scottish universities.

It says there is considerable support for a joint planning body for the university and non-university sectors, with the University Grants Committee continuing to allocate funds to the universities, while the Scottish Office continued to fund the colleges.

This planning body would advise on coordinating course provision between the sectors, and the distribution of student numbers.

The standing committee stresses that there is a general view among the universities that the STEAC report contains a great deal of perceptive and constructive analysis, and it welcomes "the persuasive arguments" that earlier government projections for demand for higher education have been too pessimistic.

The universities agree that there should be further improvements in access for mature students, "including sensible developments in credit transfer arrangements."

The standing committee adds that it strongly supports STEAC's view that there must be adequate levels of student support.

It also agrees with STEAC's warning that the emphasis on scientific and technological courses "which has become quite pronounced in universities in recent years, partly as a result of government-stimulated funding provisions," should not be allowed to diminish provision in the arts and other subjects.

"The traditional breadth of academic provision in the Scottish universities remain something to be cherished."

letters to the editor

Home truths about overseas students

Sir, – Your editorial of April 4 approached the question of overseas students from the egocentric viewpoint which has traditionally conditioned discussion of the issue. While you rehearse the arguments for having overseas students in British higher education institutes you do not address the issue of why they should leave their own countries to come and study here.

The imposition of full cost fees has had a twofold effect on many third world countries. First, the increased edge of other countries competing with Britain for overseas students has opened up new choices for the third world student with other European countries offering better grants, reception facilities and language tuition and even courses taught in English. Second, the higher costs of overseas study have provided an additional incentive for home-based courses.

If the academic argument for encouraging overseas students to study in Britain is to advance beyond mere self-interest, the educational needs of third world countries must be given greater consideration and a less patronizing view be developed of their higher education institutes. These institutes have similar problems to those in Britain; the same arguments about the effective use of resources, the relevance of their educational programmes to the market place and their role as a community resource are being deployed against them. If we respond in Britain with arguments of academic integrity, excellence and responsibility why do we not feel the need to support such arguments in the third world?

The question of educating overseas students in Britain must consider more carefully the division between what should be taught in Britain and what could best be done in the home-based institute. Given such clarification, a policy could be developed which would assist specific institutions in tailoring programmes in Britain to make particular and proper provision for overseas students, including earmarking of relevant grants in the context of the long-term objective aid programmes to help strengthen home-based institutions.

Without a coherent overall policy the suspicion will continue to persist that students are mere lucrative fodder.

Yours faithfully,
IAN HAYWOOD,
3 Eglon Mews, London NW1.

Extramural funding

Sir, – In Maggie Richards' useful survey of university adult and continuing education (*THES*, March 28), it was implied that both the Department of Education and Science and the universities are anxious to terminate the out-dated "responsible body" system of funding extramural departments.

This may or may not be a true reflection of thinking within the DES and some universities, but it is true that extramural work is being systematically undermined by funding reductions and restructuring, and by being thrust into the market place and treated as a mere commodity. And when it has been sufficiently weakened, no doubt it will be declared obsolete and abolished altogether. This is a classic strategy.

But what will have been destroyed is a unique part of our educational system which, at very little cost, secures a small slice of higher education for the very many people who have been denied tertiary education.

Not everyone in this category wants, or can contemplate, access to a full degree course or vocational updating. Some want to learn for more personal and social reasons. But this form of adult education is a less "profitable" commodity and is unlikely to survive in the market place without the support of the RB grant. At best, what will remain will be a token pimple on the body of the new continuing education.

This destruction of extramural adult education will not benefit or enhance other forms of continuing education which your reporter quite rightly praises – including better access to higher education generally for mature students, and intensive post-experience vocational education and updating courses. It will merely have removed a valued sector of the "vast spectrum of continuing education" – incidentally a sector much admired by many American adult educators whom we are exhorted to emulate!

I would suggest that the extramural system is not so much outmoded as in need of benevolent reform, so that the RB grant can again be directed towards supporting extramural courses for the very large number of people who still do not get their share of tertiary education.

Yours faithfully,
ROGER FIELDHOUSE,
Leeds University.

Adult education: not a "profitable" commodity

Assessment

Sir, – Your article in bold-faced type concerning students' assessment of lecturers at Royal Holloway and Bedford New College, London (*THES*, March 21) seems to give the impression that this is some sort of gimmicky new idea. In the department of physics in St Andrews course assessment by the students has been regular practice at the end of each course, each year and each session since 1969.

When we entered our new building in 1965, we set up a student-staff council which we think may have been the first in any university in the UK. It contains elected student members and representative members of staff, the latter in the majority.

It was student members in 1969 who first suggested course assessment; it was approved by the members of staff and first used in December 1969. It has been developed and refined by the council and has been found to be a most valuable feature of the department.

Council early on agreed that while witty comments were acceptable, frivolous comments were to be discouraged. The students treat the assessment questionnaire forms seriously and the response is often by more than three-quarters of the class members.

Lecturers are sometimes chagrined by what they get back, but most agree that criticism is valid and that they can, as a result and with luck, next time find that they are both audible and lively in delivery and write legibly on the board, etc, etc . . .

I am, Sir,
J. F. ALLEN,
Department of Physics,
University of St Andrews.

Micro networks

Sir, – Brian Bramer describes an extreme view of computing service provision at Leicester Polytechnic (*THES*, March 28). The impression gained is of a service entirely distributed on departmental microcomputers, with "node committees" determining and managing the equipment. There are at least four substantial problems with this approach.

First, it results in a great variety of incompatible equipment, which confuses students and renders effective support very difficult.

Second, it seems likely to result in a flat distribution of computer power, rather than the vertically integrated systems described by Henry Norton (*THES*, March 14), which provide for a range of computing power needs from mainframe to micro.

Third, it is not cost-effective. Micros/workstations are fine for the individual user, but they cannot be time-shared. Far more are required to give an equivalent service to that provided by a central computer which is networked to a large number of cheap workstations, and the cost of such total distribution is very much higher. Software licensing costs are likely to multiply by the number of "professional distributed workstations" compared with single licences for a time-shared service. Software maintenance costs will be correspondingly higher, and it is therefore likely that software maintenance will not be contracted out – to the detriment of users. Hardware maintenance costs are also likely to be considerably higher than for a centrally time-shared service.

The diseconomy but very necessary chore of "support" includes operations, housekeeping of files, maintenance, providing good documentation, and providing an advisory service for users through courses and personal advice. This task increases with the variety of equipment used, and necessitates an increase in the numbers of professional staff required. Academic staff have rarely got sufficient time, or inclination, to manage and still less to undertake these professional duties on a continuing basis. The virtual impossibility of increasing professional staff means that such a service will therefore be poorly supported.

These factors lead inevitably to the conclusion that central standardization and the professional management of equipment and software remains the essential prerequisite to cost-effective and efficient computing services. For the foreseeable future, that role will have to be undertaken by professional staff based in computing centres.

But this is not to say that users should not have an important role in determining the service provided. Computer centres need to keep in constant touch with the requirements of users, interpret and co-ordinate these demands, and implement the resulting services in the most cost-effective way. Cost-effective solutions mean that academic staff then have more funds for their own use.

Common sense suggests that the most effective service results from a compromise between the total distribution of computing at Leicester Polytechnic and the totally centralized computer service which is also still prevalent at many institutions.

Such a service is well on its way at the City of London Polytechnic, where VAX computers, distributed over four main campus sites, together with their associated professional staff, are networked together and accessed by Ring networks. The ubiquitous BBC or quasi-IBM workstations have been adopted as a cheap and cheerful way of providing and supporting a total and vertically integrated computing experience.

The situation at Leicester Poly apparently provides an object lesson for academic computer centres – adapt, or go out of business.

Yours sincerely,
RICHARD SHEPHERD,
Head of Computer Services,
City of London Polytechnic.

Science source

Sir, – I was pleased to see my article on the limits of science in print last week ("A vision out of focus" *THES*, March 28). What was not mentioned, though, was its source.

The article derives from one of a series of debates on the limits of science held earlier at the Institute of Contemporary Arts, London. It is also to appear in the book *Science and Beyond*, edited by myself and by Dr Lisa Apignanesi, which will be published next month by Blackwell.

Yours sincerely,
STEPHEN ROSE,
Department of Biology,
Open University.

After Jarratt

Sir, – Professor John Sizer (*THES*, March 28) has looked fairly clearly at the implications of the Jarratt report for university planning, and in his last paragraph he properly emphasizes the real origins of initiatives in teaching and research. Earlier in his article, however, he seems to look with the eyes of Keith Joseph rather than those of a sympathetic participant in the struggle to maintain academic values.

"Naturally there is a general reluctance to face reality and make hard choices" would surely be better expressed as, "Naturally there is a general hope that Government and the University Grants Committee will face reality and make absurd choices unnecessary". When he speaks of institutional inertia he implies reluctance to change, ignoring the great enthusiasm for new developments dictated by the intrinsic logic of a field of work.

There is great and proper reluctance to give priority to new developments simply because industry or Government departments want them pursued but want someone else to foot the bill; because, if however managerial they must become, it cannot be the proper task of vice chancellors to be accessories in the misuse of public funds.

Yours faithfully,
B. R. COLES,
Dean of the Royal
College of Science,
Imperial College.

Language cuts

Sir, – In their front-page report of Professor Martin Harris's revelation of University Grants Committee plans for rationalization of small language departments (*THES*, March 28), Peter Aspden and Karen Gold put two and two together to make a misleadingly rosy five.

When they wrote that Scandinavian studies would "go from four to five departments", they were interpreting Professor Harris's words in the most generous of lights. What he actually said, was that one new department would be created, making a final total of five.

This in fact represents a net reduction in the number of departments operating nationally. What Professor Harris failed to mention was that Scandinavian studies is currently taught at eight British universities.

Yours faithfully,
SARAH DEATH,
85 Ediva Road,
Meopham, Kent.

Unlisted

Sir, – I have been urged to write to you by the numerous colleagues who have noticed that your list of "40 new fellows" (*sic*) elected to the Royal Society (*THES*, April 4) contained only 39 names, mine having been omitted.

Yours faithfully,
JEAN O. THOMAS,
Department of Biochemistry,
University of Cambridge.

Letters for publication should arrive by Tuesday morning. They should be as short as possible and written on one side of the paper. The editor reserves the right to cut or amend them if necessary.

A few weeks ago I made a rash prediction in this column that the Settle-Carlisle railway would survive – and even that I believed the Railway Board wanted it to do so. Reading accounts in the press of the public hearings into the proposed closure of the line, I have my doubts. But the inquiry, like all such inquiries, should with any luck continue for many months or years; and since there have been objections from six MPs, 107 local authorities and some 7,129 individuals there should be ample evidence of its popularity.

For me the railway has for many years meant romance and victory, and I will tell you why. It was a late line – not the last one but almost so. It was opened on May 1 1876 after one of the great engineering episodes of history. Navvies came from Ireland (as usual) but also back from the United States where they had worked on the railway across the great plains.

At Selside in Ribblesdale there is a group of cottages known as Salt Lake, because the inhabitants of the camp had come directly from Salt Lake City. In the church at Chapel-le-Dale there is a handsome memorial with the names of the navvies who lost their lives during the construction of the Ribblehead viaduct. Local accounts are of a hard working, harder drinking and utterly casual lot of men who just said "Cheerio" as they fell off it to their deaths.

The line goes through the most spectacular scenery, sometimes carved into great green shapes, sometimes windswept and desolate, always unexpected and memorable as it climbs and falls to the plains before Carlisle. It was on that line that I scored my victory.

One autumn day in the late 1960s I took my children by car to Settle, left it there and boarded the train for Carlisle for an outing. We planned to stop often, climb down into villages, have a picnic and crawl back from Carlisle tired and happy at the end of a long day. That is what happened. It was an unforgettable day.

What made it more unforgettable for me was that just after the train set off I discovered that I had left my cigarettes (and small cigars) at home. I was a compulsive smoker, inhaling at least 20 cigars or more cigarettes a day.

By the time the train reached Horton-in-Ribblesdale I was beginning to feel desperate. And there on the platform, just watching trains go by, was a friend who also smoked heavily. As soon as the train stopped I leaned out of the window and asked if he could give me a cigarette. "Of course," he replied instantly, reached into his pocket, found nothing there and said, "Terribly sorry, I must have left my cigarettes at home".

It is impossible to explain to anyone who has not been a compulsive smoker the horror of the shock. At last, I thought, I understand the horror when the citizens of Edinburgh heard that the Scots army had lost the battle of Flodden.

I decided that I could not go through another experience like that. When I reached home late in the evening I found my cigars and cigarettes and threw them into the fire. And because I was an addict (for which there is no complete cure) I have never ever taken a puff since. Perhaps I will give evidence at the inquiry.

Patrick Nuttgens

Pay: V-cs hold out for reforms

by David Jobbins

Vice chancellors have ruled out an early pay offer to university lecturers and are convinced that more progress must be made on structural reforms before Ministers can be convinced to help tackle salary erosion.

Leading vice chancellors considered making an offer to the Association of University Teachers to clear the decks for joint efforts on the case for more resources in this summer's public expenditure round.

But, in the absence of a formal pay claim from the AUT, they decided against action and are to carry out consultations with their colleagues before taking a final decision.

But they believe there will be no extra resources for the immediate pay round and feel that only a commitment to greater local flexibility and salary differentials between subject areas will be enough to convince Ministers that money should be made available to tackle general pay levels in the 1987/88 salary round.

Both sides are pinning their hopes on a jointly-financed independent study of recruitment, retention and motivation problems associated with falling salary levels among academics.

A pilot study at six universities was completed last week and the consultants, PA Personnel Services, are to embark on a full-scale survey at the same institutions to find evidence for the view shared by both sides that damage is being done to the system.

Vacancies are also being systematically monitored and the consultants movements outside the university sector.

Their report is due in four weeks – to meet the deadline set by the public spending round for 1987/88.

But a senior management official made clear this week: "The view of the whole of this side is that it is not possible to offer something on account. There is no additional money."

The evidence placed on structural reform as the key to the possibility of more money places the AUT in a difficult position. Its proposals, which centre on a common career grade comprising the lecturer and senior lecturer scales, have been turned down in the universities and its national council has rejected the employers' proposals.

Nevertheless, talks have taken place, with more due later this month, and the employers are said to be satisfied with the climate in which they are taking place.

The employers want to retain national bargaining but allow universities greater freedom to use shorter pay scales to introduce local flexibility and a finer response to market trends, with differential salaries for subject areas a distinct possibility.

Bart's urged to reconsider joint plan

Pressure is increasing on St Bartholomew's Hospital Medical College to reverse its decision to pull out of a scheme to establish a new pre-clinical school in East London.

The "BLQ" scheme, which envisages a joining of forces between St Bartholomew's, the London Hospital Medical College and Queen Mary College, has the support of London University and the University Grants Committee, but its future has been in doubt since St Bartholomew's suddenly pulled out of discussions last October.

But now a fresh report on the plan, prepared by the Dean of the London Hospital college, Professor Michael Flower, stresses that the inclusion of St Bartholomew's is desirable from all points of view. If the college decided to stay out of the scheme, it would become "isolated and vulnerable to closure", says the report.

The chairman of the University Grants Committee, Sir Peter Swinnerton-Dyer, has already said that if the scheme went ahead without St Bartholomew's, it would "only be on the basis that future recurrent grants to the university will contain no provision for a separate pre-clinical school at Barts".

Sir Peter said in a letter to the vice chancellor of London University, Lord Flowers, that the St Bartholomew's withdrawal was "both a shock and a matter of serious concern".

Pressure on members of the Association of University Teachers at St Bartholomew's has also come from the union's national office. The AUT London officer, Mr Malcolm Keight, has warned that members faced "uncertainty and insecurity" if the college was excluded from the BLQ scheme.

Members of the AUT at the other two colleges have endorsed the findings of Professor Floyer's report and are also keen for the scheme to go ahead as originally planned.

The new school, in the Mile End Road, would have a total intake of 255 students – 200 medical and 55 dental – in the event of the three colleges linking up. But 105 of those medical students would come from St Bartholomew's, making it an essential component of the plan.

Now the university's medical advisory committee, which meets on Tuesday, has to consider if and how the scheme can go ahead with only two colleges. The UGC has already made it clear that it is too late to change the scale of the project.

Centrepiece of an exhibition which nearly did not take place is the huge model of a rearing horse in corrugated card coated with plastic by Marcel Baettig, a fine art student at Newcastle Polytechnic. Marcel and 15 other students turned the condemned and leaky warehouse into an exhibition gallery after failing to find a suitable venue.

Action call on extremists

Labour MPs have called on the chairman of the Conservative Party, Mr Norman Tebbit, to stamp out extremism in the Federation of Conservative Students.

A Commons motion, tabled this week by Mr Derek Fatchett, MP for Leeds Central, claims that the extremist views and behaviour which led to last year's party investigation were repeated at Scarborough.

In particular, the motion, which by Wednesday had attracted 41 signatures, noted that the conference had refused to implement one of the inquiry's recommendations – that the federation should work within student unions.

Independence of HMIs threatened

The independence of Her Majesty's Inspectorate is constantly threatened by the Department of Education and Science, Dr Clive Booth a former HM Inspector and now director of Oxford Polytechnic told the Association of Polytechnic Administrators.

The inspectorate was a constitutional tool of the Secretary of State for Education and Science, who used it legitimately in asking for advice that informed policy. But inspectors' reports were looked at by officers in the DES before they were published.

"There is a tendency for officers of the DES to want to influence what inspectors write," Dr Booth said. "Up to now inspectors have been successful in telling the DES to get lost.

"But there is a risk the inspectorate will get too close to the DES. Some inspectors feel there is no point in saying 'capital and equipment in college X or the sector as a whole is at crisis level', because the DES will not allow us to publish it. I am not saying that has happened, but there is a risk".

Many HMIs were unhappy at their advisory role in rationalization exercises and the National Advisory Body, because institutions increasingly saw them as people who determined closures, he said.

At the same time there was a tendency for HMIs to make flying 24-hour visits to institutions, followed a few months later by a NAB report on rationalization.

"You can't help but worry about the basis on which the judgements were made," he said.

But the advantages in having independent inspections – something the universities did not have and should have – outweighed the disadvantages, he said. "I think there is still a role to public sector higher education if HMIs were not there to advise and contribute, than there is when they are."

Don't rush it, polys told

Polytechnics should not rush to dismantle the binary line until they were sure of competing in a unified higher education system, Miss Sheila Browne, principal of Newnham college, Cambridge, and former senior chief HM Inspector said this week.

"I think you would lose much more than you would gain if the progress to a single system came too soon," Miss Browne told the Association of Polytechnic Administrators' annual conference.

"I have very little doubt that by co-operation, consultation, and much more self-awareness on the part of institutions, the higher education system including the Open University is growing towards a single but complex system," she said.

"But at present I hope there will be more time allowed for the various institutions to discover and explore their potential strengths before any form of unification is attempted."

Many students saw the institutions of higher education as qualifications factories, she said. That really was a downgrading of higher education unless the qualifications were liberally gained and delivered.

That would be less likely if the pressure to increase science and technology courses meant arts courses were less well represented.

Cardiff's debts put merger in doubt

by Peter Aspden

The future of the merger between University College, Cardiff, and the University of Wales Institute of Science and Technology depends on the results of an inquiry into Cardiff's financial position, currently being carried out by the accountancy firm Price Waterhouse.

The Department of Education and Science took the highly unusual step of ordering the inquiry when the extent of the financial deficit facing Cardiff became known last November. It is currently believed to be facing a deficit of £1.25 million.

Now academics at Uwist are anxiously waiting for the results of the inquiry to determine whether the merger should go ahead. The principal, Dr Aubrey Trotman-Dickenson, said the institute had worried consistently over the past five years about Cardiff's financial position.

"We have expressed misgivings ever since 1981, during an earlier round of merger talks, that there were likely to be financial difficulties at Cardiff, largely due to the relatively large number of academic and academic-related staff there," he said this week.

The institute requested a financial appraisal of both institutions by the former vice chancellor of Brunel University, Mr Stephen Bragg, reflecting its apprehensions over Cardiff's situation.

Dr Trotman-Dickenson said the target date for the merger was August 1, 1989, but legal procedures were likely to be extremely complicated. Uwist would seek assurances on Cardiff's financial position before entering more detailed negotiations.

A report issued by the two institutions' joint committee on the merger last year said that Cardiff stood to lose up to 100 jobs to balance its books, irrespective of whether the merger went ahead. Natural wastage was unlikely to be an adequate means of dealing with the problem.

But the Association of University Teachers said this week that it would vigorously oppose any compulsory redundancies at the college. Deputy general secretary Mr John Akker, said: "It is not the fault of the staff that the college is in financial difficulties. We will be seeking immediate talks at national level with the college and the DES as soon as the report of the inquiry comes out."

UGC stops Croham clock

The timetable for the Croham inquiry into the University Grants Committee has slipped because the UGC is so busy finalizing its new funding policy.

Croham had originally hoped that management consultants Coopers and Lybrand Associates could start a study of how the UGC works in April.

But the UGC has put them off until June because of their pre-occupation with the funding and selectivity exercise, which culminates in May with the sending out of letters detailing this year's recurrent grant allocations.

Coopers and Lybrand have been asked to analyse and report on the procedures adopted by the UGC for the allocation of resources to universities, and their operation in practice; the functions and methods of operation of the sub-committees; and the staff of the UGC; and all of these with particular regard to the efficiency, economy and effectiveness of the UGC, the fulfilment of the UGC's terms of reference and the adequacy of the means for doing this.

Croham has now finished taking evidence although still has a number of visits planned. A two-day retreat has been planned for the end of July but the report is unlikely to be ready until late autumn at the earliest.

'Race bias'

Continued from front page

dents over the period, with 7 per cent in 1982 falling to 3 per cent in 1984. The school has now merged with Charing Cross, which comes midway down the list of 13 schools then in existence with an average of 9 per cent over the three years.

Apart from Westminster, four schools – Guy's and St Thomas, London, St Bartholomew's and St Mary's – averaged only 7 per cent over the period while St George's (12 per cent) and the Royal Free (6 per cent) had the highest proportion.

Medical school administrators denied that discriminatory admissions policies were being operated.

Colleges will take fight to save town planning courses to Sir Keith

Two of the public sector institutions whose town planning courses are threatened with closure for the second time are to make strong protests to the Secretary of State for Education.

Both Coventry Polytechnic and Essex Institute of Higher Education (formerly Chelmer) stand to lose their courses if proposals by the University Grants Committee/National Advisory Body transbinary working party on town planning published last week are implemented. This recommends the closure of seven departments or town planning courses.

Courses at Coventry and Essex were reprieved on grounds of quality and specialization after having been earlier marked for closure by the NAB in its 1983 review of town planning.

Dr Geoffrey Holroyde, Coventry Polytechnic director said he was very unhappy and surprised at the proposal since the quality of the course was so well recognized and was even acknowledged in the working party's report.

"We shall be making strong protests," he said. "What bothers me is, how do we motivate people to produce good results, if they find that their heads are on the block for quite other reasons?"

On the surface the report appeared to be even-handed as far as the numbers of universities and polytechnics losing their courses were concerned. But when you looked at provision between 1984 and 1987, you could see that the polytechnics' intakes were actually down while that of the universities went up.

"Basically all this will result in driving students away from the cheaper polytechnic education to the more expensive university education at extra cost to the taxpayer," Dr Holroyde said.

Dr Mike Salmon, director of the Essex Institute said that the loss of their course would mean that the whole of East of England would have no degree in town planning.

He pointed out that the course had been reprieved last time because it had a rural specialism. This was still the case. Moreover, the degree as part of the school for built environment met the criterion of relevance to other cognate disciplines, while on viable size criterion it had been limited and had not chosen an intake of 24 full-time equivalent students.

Considering that the college was in an area which had the fastest growing construction industry in the country, the loss of the degree would badly effect the professional development of town planners, as well as the institute's research programme.

Reading University, whose post-graduate course in environmental planning is threatened with closure, said that it strongly objects to the assumptions, particularly on "critical mass", made in the working party report.

Mr Simon Thorne, the sub-dean of the faculty of urban and regional studies, said that if this criterion was applied widely then most interdisciplinary courses feeding on other strong disciplines around them would be axed. The course had only just been assessed by the Royal Town Planning Institute and had passed its review with flying colours.

Mr Thorne stressed that the course would be offered in 1986 and that other courses in the school of planning studies and the faculty were quite unaffected.

The Inner London Education Authority's deputy education officer, Mr David Falcon, said that the authority viewed with great alarm the proposals to reduce the provision for town planning in London.

Before responding to the NAB's invitation to have discussions with University College about a centre north of the Thames, the authority would want to examine in great detail the report of the transbinary working party.

DON'S DIARY

MONDAY

Read *The THES* on the train to work. Don't read "Don's Diary" as a rule, usually some senior lecturer from a southern university writing about all that's well with the world and what a nice time they are having. This does not equate with my reality, therefore usually skimmed over. Today's however was by a temporary lecturer from Scotland pondering his fate in the US. Brings back memories of being in the same position a couple of years ago. Post-doc in Boston sounded fine, $25,000 sounded even better – but it was a long way from home. Glad to get a job here at the time. Reflection sparks off reappraisal. Prepare a list of pluses and minuses concerning present situation. Quickly abandon idea as the minuses won 9-1. Settle in to read over morning's lectures.

TUESDAY

Draft letter to *The Times*. Incensed by comment in the letters page indicating that research and development have no definition and hence no place in modern science and engineering. The answer to the current industrial malaise it appears is to train twice as many graduate scientists as engineers. It never fails to amaze me that some people do not make the connection between new technology, ideas and research.

Without the research base the rest eventually come to belong in a museum. Am reminded of the anecdote about the 19th-century New Yorkers who predicted that by 1920 they would be neck high in manure. As a consequence the 20,000 manure sweepers that were predicted to be required were trained post haste. Regrettably for the unemployment rates among such professionals the new technology was invented elsewhere. Pull out grants, file, re-read formal but firm letters of rejection. Regret that alpha rating does not pay for research assistance.

Mentally begin to prepare wife-oriented excuses for spending the weekend in the lab. Final year tutorial develops into re-assuring discussion that this year they needn't worry too much about past press concerning graduate unemployment. The relationship between demographic trends and demand for graduates proves a useful illustration of the perils inherent in making predictions from descriptive statistics.

WEDNESDAY

Mid-week enlivened by final year conference. The aim is to reproduce as closely as possible a conference situation. Presentation of papers is organized into sessions with chairpersons and formal question time. The event is annually preceded by an acute shortage of overhead pens and slides as the students prepare their papers. The atmosphere of the occasion is complete when, on the day, staff and students alike turn out their "conference romper suits".

Why is it that all male conference delegates wear blue blazer and grey flannels? Am reminded of that time in Holland when I approached someone dressed in the approved manner to discuss a particular point only to discover that I was talking to the hotel porter. The conference (or "Techniques of Communication" as it is more formally known) was generally a great success and in authentic style rounded off with cheese and wine in the seminar room.

THURSDAY

Meet confused looking head of department in the lift, shows me letter from Open University tutor who uses seminar room on Wednesday evenings. Apparently the collection of dirty wine glasses, cigarette ends and bits of cheese detracted from his teaching. Receive notification that other referee also rejected that paper from someone in Spain.

Ponder the difficulties people have in conducting research in other countries and writing reports in a foreign language. Without knowing why I'm reminded of Prince Charles' comment regarding Britain becoming a "fourth-rate nation". Get reply from vice chancellor saying that I can have the money to go to that conference in Chicago after all. It was a bit of a cheek writing to him arguing that the annual staff allocation for travel of £100 coupled with declining stipendary spending power rendered conference presentation a little difficult. Still, if "you don't buy a ticket you can't win the raffle". Worse still it was true.

FRIDAY

Give talk on "addiction" to local school. It went quite well and I'm glad that I chose not to give the "scare 'em to hell" version in view of the news in this morning's paper saying that the recent "anti-heroin" campaign actually decreased the negative attitudes to heroin. Instead gave them the factual approach – these are frightening enough – however, little concerned that they weren't fooled by the OXO cube posing as "cannabis" and the talcum powder pretending to be "smack".

Get lab prepared for tomorrow and finish off writing research manuscript. Get home about six to be greeted by another letter from the bank – they might like to say "yes" but they clearly don't understand that it takes time to recover from the financial consequences of spending seven years as a student – file it under "B" with the rest. Have pondered re-mortgaging but we've only had the house for two years and in any case if the rumours are true we'll all be moving when the UGC's letter arrives in May (or was it July?).

Have a little chortle about the current round of speculations – relocation to the north-east, the north-west and closure – which cheers me up. Go to local social club for a pint – greeted by usual hoots from teachers ("counting your wages", "looking forward to your summer holidays?" the last one usually limited to March – you know the sort of thing) and some new ones, mock cringes followed by "Don't hit me" and "If you disagree old chap, just beat me up." Had forgotten about politician being at the university this week. He should have realized that the closure of the trans-pennine rail link was a bad omen for the popularity of Carlisle in this part of Yorkshire. Beat a hasty retreat home.

SATURDAY

Gas leak in the university necessitates the building being evacuated, thus decide to abandon experiment in view of possible difficulties in replication. Fantasize writing into research report "experimentation carried out in temperature controlled room containing 50 units/cm³ household gas". Decide not to have relaxing smoke before going home. Instead re-do Monday's lecture on learning theory. Struggle to make connection between current situation and theories which state that "behaviour which has negative consequences results in the loss of that behaviour from the subject's repertoire" – conclude that the rate of learning among academics must be highly variable, otherwise we would all be joining the "drain".

SUNDAY

Re-do pluses and minuses count, the score now stands at 14–2 (the additional plus being that the university looks quite nice now that the daffodils are coming out). Spend rest of day trying to work out American equivalent of "Clissajob" and check that my passport is up-to-date.

Colin A. Hendrie

The author is lecturer in psychology, University of Bradford.

Landmark for the Bartlett

by Peter Aspden

Having your professional work derided all over the front pages of the national press is bad enough, but when that criticism comes from a member of the shy and retiring royal family, you'd be forgiven for wanting to bury yourself in a deep, dark hole.

That wasn't quite the reaction of Mr Peter Ahrends, but he did decide that dignified silence was the only response to Prince Charles's attack on the "monstrous carbuncle" he had submitted as his entry for the competition to design a new extension to the National Gallery.

Although the carbuncle won the competition, and, more significantly, was found to be the most popular in a poll of visitors to the gallery, Mr Ahrends was not going to be drawn into a war of words. Now he must start getting used to a higher profile, though, in his new role as professor of architecture at London's Bartlett School of Architecture and Planning.

Professor Newton Watson, current head of the Bartlett School, describes the appointment as a "unique and exciting choice", rare language in the restrained world of academic affairs which will be claiming most of Mr Ahrends' time.

He will remain an active partner at

ABK, the firm he helped found with his colleagues Richard Burton and Paul Koralek, trying to combine his work in the practice and in education. He, and the firm (all three partners work closely together) are known for a wide range of architectural design, notably the residence building at Keble College (for which won a Royal Institute of British Architects award.

Another landmark was the design of the Cummins engine factory in Scotland, when unusually, the workers using the premises were interviewed and consulted before the final draft was produced. The firm was also among the first in this country to employ a social psychologist when designing the Felmersham housing scheme in Basildon.

Mr Ahrends has always had strong connections with higher education, giving master classes at a number of universities and polytechnics, and acting as visiting critic and external examiner for institutions as far afield as Ghana and Canada.

Letters and reactions in the architectural press already hint at the popularity of the appointment at a time when the subject is under public scrutiny. Mr Ahrends and his two partners have even made their peace with that famous family; we has it that Prince Charles, touring their offices after his outburst, was moved to remark: "I wish it had been you." Back came the reply quick as you like: "And we wish it hadn't been you . . ."

Regional link urged for social work

Regional collaboration between universities, public sector institutions and the personal social services agencies will become necessary when the new social work qualification is introduced.

This is one of the topics expected to be discussed at the council meeting of the Central Council for Education and Training in Social Work being held today.

The introduction of a new single qualification for social work based on three years' training to begin in 1990 was agreed by CCETSW last year.

According to papers going to the council, if study and practice for the new award are to include prescribed areas of special emphasis, providers of education and training will have to plan how to use the contribution of special expertise and practice available in the area.

The papers also say that the need for various forms of regional planning is becoming more obvious throughout higher and further education in order to meet the consequences of resource shortages and the short-term decline in numbers in the potential student age group.

But it is pointed out that such planning has to take account of the legitimate conflicts of interest as well as historical sensitivities between the universities, polytechnics, central institutions and the major higher education colleges.

The papers stress though that there are encouraging signs that discussion and preliminary ideas about planning are beginning in some regions. At the moment this is mainly to plan more economic and effective use of practice learning facilities.

Other topics likely to be discussed by council are the position of existing award holders now and in the future when the new award is in place and the assumptions on which resource discussions should be based.

Offer to manual staff eases low pay trap

University manual workers are likely to accept a deal which vice chancellors believe is a further step towards reducing a long-standing low pay problem.

They have been offered a flat rate £6 a week on all grades – coupled with a merger between the two lowest pay scales.

But the package, estimated at 8 per cent on the salary bill, still means a lower rise for employees at universities in the manual workers' consortium compared with universities who pay local government rates.

There the bottom three scales have been merged, and employers are committed to a job re-evaluation exercise, which the vice chancellors were not prepared to match.

Leaders of the manual workers' union are consulting with their members and are due to respond to the offer by the end of next week. Although precluded from recommending acceptance, union leaders are understood to have indicated their support for it.

The employers were not prepared to go as far as the local government deal for fear of upsetting small differentials which they regard as important. The merger of the bottom two scales affects thousands of part-time workers, principally in catering and cleaning services.

Sympathy for the low pay case presented by union negotiators was tempered by awareness that the student grant over the main period covered by the provisional deal was set to rise by only 2 per cent, limiting the increases in hall fees and catering charges.

Discussions with the manual workers have been almost a re-run of last year when the offer eventually accepted was made at the first full negotiating meeting. Then though, the increase was a flat rate £4.60 following a study of earnings levels.

The National Union of Public Employees and the National and Local Government Officers' Association have commissioned a further study of the low pay problem in the universities.

Conducted through Ruskin College, Oxford, it is expected in six to eight weeks and will underpin the claim for a pay rise of £10 a week or 10 per cent for white collar staff, whichever is the greater. They are due to meet the employers later this month.

The universities are still considering whether to make an interim pay offer to technicians pending the findings of a joint study into recruitment, retention and motivation problems. Their negotiators are also expected to give their answer to union leaders later this month.

Computer staff have lodged a claim combining the £10 a week underpinning sought by white collar staff and the substantial rise demanded by technicians. Talks are continuing over ways of bringing the agreement on a national salary structure into line with the demands posed by new technology.

Weekly wages for university manual workers from April 1 if offer is accepted.

	1985	1988	percentage rise
	£		
Grade A	76.30	83.40	9.3
Grade B	77.40		7.7
Grade C	78.20	75.20	7.98
Grade D	82.70	88.70	7.25
Grade E	85.40	91.40	7.02
Grade F	89.00	95.00	6.7
Grade G	92.00	98.00	6.52

Work starts on expansion

Magee College in Londonderry has finally obtained planning permission to build the facilities which will mark the first stage of its £6.5 million redevelopment programme. Work on the existing site but to the south of the lawns, is to start immediately, to a revised plan and timescale.

The Derry Committee is making overtures to the Department of the Environment to have the whole area stretching from Magee to the North West College of Technology declared an educational zone. This proposal was contained in the Londonderry Area Plan, but omitted from the arrangements which upgraded Magee making it part of the University of Ulster. It would enable the council to give the university the seven acre Aberfoyle estate. A single campus would then be created.

Both the university and the civic committee see purchase of the estate, which came on to the market after the redevelopment plan had been drawn up, as vital for Magee's expansion after 1990 when some 1,000 students are envisaged.

Michael Canavan, the civic committee's spokesman said: "Our fear is that by 1990 there will not be an inch left for another student, or another lecturer, and that is why we want a decision made to purchase the land while it is still available."

Scots unions threaten strike

Officials of Scotland's further education unions are recommending a one-day strike and total non-cooperation with the Scottish Vocational Education Council in protest against privatization of new National Certificate courses.

The executive committees of the Educational Institute of Scotland and Scottish Further and Higher Education Association will meet shortly and are expected to ballot their members on the officials' proposals.

The unions have been angered by what they claim is a breach of a two-year moratorium on privatisation by Scotvec.

Degree courses bear brunt of NAB cuts

by John O'Leary

The main impact of the cuts proposed by the National Advisory Body will fall on degree courses but is spread reasonably evenly between polytechnics and colleges.

Although the disparity between degree and sub-degree work is not as stark as the NAB's own figures imply (because large numbers of students on professional courses were wrongly classified this year) the cut is twice as heavy for degrees. Their first-year numbers are down by about 8 per cent, compared with 4 per cent on other courses.

Student places were allocated by NAB officers working in regional teams, their scope for manoeuvre restricted by the division of the 19 academic programmes into three categories, all taking a predetermined cut. Overall, student numbers would be reduced by about 7 per cent.

The covering letter from Mr John Bevan, the NAB secretary, says that account was taken wherever possible of priorities listed by institutions in their initial returns. And it goes on to invite directors and principals to suggest changes to the proposals as long as they do not alter the total number of students allocated.

The proposals will be modified not only by the NAB board and committee, which will start to discuss the details of the plan later this month, but also by six smaller planning exercises. The most important will be the revision by the Department of Education and Science of the NAB's proposals for initial teacher training allocations, which is expected to increase the number of institutional closures.

The other subjects where studies are likely to alter the detailed proposals are in town planning, hotel and catering, librarianship, ancillary health subjects and building.

Although the **Rose Bruford College of Speech and Drama**, at Sidcup, is the only college recommended to lose all its student places, more than a dozen would have all their advanced courses removed. They would survive because of the preponderance of non-advanced courses. The colleges concerned are **Keighley, North Tyneside, Dunstable, Barnsley, Rochdale and Bury colleges, the Stourbridge College of Technology and Art** and small providers in **Durham, Sunderland, Coventry** and **North Yorkshire.**

In the least protected programmes, big cuts are proposed at: **Newcastle Polytechnic** (all humanities to go); **Brighton Polytechnic** (also all humanities); **Liverpool Polytechnic** (to lose combined studies programme); **North Cheshire College** (all humanities); **Birmingham Polytechnic** (150 places in social work, careers guidance and law); **City Polytechnic** (170 places in programme dominated by business law); **Worcester and Crewe and Alsager colleges** (social and administrative studies to go); **Buckinghamshire College** (sociology to close); **Leeds Polytechnic** (fine art to close); **Teesside Polytechnic** (two design courses cut).

Courses are also earmarked for closure in languages at North Staffordshire and Trent Polytechnics and the Essex Institute of Higher Education, and in the social and administrative programme at **Portsmouth** and **North Staffs** polytechnics.

In the most heavily protected programmes, **Wolverhampton Polytechnic** is recommended to lose all its engineering and **Sunderland Polytechnic** to lose its civil engineering.

A series of mergers are proposed. The **Wimbledon School of Art** would join **Kingston Polytechnic**; **West Midlands College** would go in with **Wolverhampton Polytechnic**; **Ealing College** would amalgamate with the **West London Institute**; and the biggest would take place in Devon, joining **Plymouth Polytechnic** with the **College of St Mark and St John, Rolle College, Seale Hayne College of Agriculture** and the **Exeter College of Art.**

Local authorities in Cornwall, Kent, Norfolk and Avon have been left to rationalize provision in art and design, with the likelihood that more mergers would follow there. All have reduced allocations.

	FIRST YEARS			ALL YEARS		
	1986/87	1987/88	% Change	1986/87	1987/88	% Change
Degree and above	70015	61800	– 11.7	182560	172090	– 5.7
Other	61915	61240	– 1.1	105510	106950	+ 1.4
Total	131930	123040	– 6.7	288070	279040	– 3.1
Full-time/ Sandwich	93170	86020	– 7.7	221180	214170	– 3.2
Part-time	38760	37020	– 4.5	66890	64870	– 3.0

No	PROGRAMME Title	FIRST YEARS	ALL YEARS	PERCENTAGE CUT
01	Engineering	15490	33450	6
02	Technology	1390	3340	6
03	Construction	7820	19010	6
04	Science	6100	16290	6
05	Env. Science	3540	11060	11
06	Agriculture	710	1920	0
07	Health	5090	9100	8
08	Mathematics	7740	18080	6
09	Business/Mgt	27330	53360	6
10	Catering	2390	6280	6
11	Other prof/voc	2840	4660	11
12	Social Admin	9190	22910	16
13	Languages	1660	5520	11
14	Humanities	3530	11480	16
15	Art	1960	6260	16
16	Design	5800	14930	6
17	Performing Arts	1480	4510	16
18	ITT (1986 intakes)	12760	29580	0
19	INSET	6150	9300	6
Total		123040	279040	7

Blowing hot and cold

It took two years to set up the internationally important experiment which has just begun in these domes. They are linked to an induced pollution and temperature control system which will simulate the pollutant levels to be found in the atmosphere over large parts of Europe.

Cold air is being blown into two of the greenhouses to create severe frosts of six degrees Celsius below normal outside temperatures.

The investigation, by scientists at Lancaster University department of biology, is a five-year project to solve a tantalising pollution puzzle. Although it is accepted that combinations of the common air pollutants sulphur dioxide and nitrogen dioxide injure plants in urban and industrial areas, no one has yet reproduced under experimental the devastations to be found in big forests.

Professor Terry Mansfield (centre) said: "We are testing the theory that air pollutants do not kill plants directly but weaken their defence mechanisms against other harmful factors such as severe frosts and drought." Also in the picture are researcher Peter Lucas (left) and research associate Dr David Cottam.

Multi-ethnic lessons from New York

by Owen Surridge

New York City College and London's South Bank Polytechnic have spent the week wrestling with the difficulties of providing multi-ethnic higher education in the inner cities.

The theme was to pass on the experience of the New Yorkers, who are somewhat ahead of Britain in this matter, and to exchange ideas. The conference could become an annual event for as long as the problem lasts.

The tenor of the meeting was businesslike, the quiet confidence of the Americans containing the volatility of some participants from this side of the Atlantic.

This was most clearly demonstrated by Dr Len Beckum, dean of the New York College's school of education, whose relaxed manner was the perfect foil for tension. Rejecting the label "black", pinned indiscriminately to the ethnically disadvantaged here, he spoke only of minorities.

This did not mean he was soft about the need for integration. Access courses were not enough in themselves there was a need to retain challenge along with opportunities to succeed.

"The art of educational planning is to provide a broad enough challenge for all to measure up against. There must be challenge and the chance of failing to meet that challenge."

Much more important to the release of potential was a climate which assumed the student was worthwhile, he said, then students would succeed at different levels according to their potential, their interests and what they wanted to achieve.

First, though, it was necessary to provide minorities with role models of their own kind as teachers and professionals they could respect in a generally supportive community. "If you want your ideas to be supportive," said Dr Beckum, "they will have to be valid outside the classroom. It is important to have community support for what is being done".

The difficulty of assessing the extent of participation of black and Asian minorities in higher education was spelt out by Ms Stina Lyon of South Bank Polytechnic, who said statistics did not exist for the universities and figures were hard to come by elsewhere.

She claimed that minority groups often saw themselves as not the kind of people who went into higher education. Those who did often felt they had as much right to it as anyone but, because of the universities' insistence on admittance by A level results, they were obliged to secure entrance through further education. She claimed the practice was, in effect, discriminatory.

Ms Maggie Woodrow, of the Open College of South London, said much of the answer was to draw members of disadvantaged minority groups into higher education by way of access courses.

She cited a poster advertising campaign for law courses after the Brixton riots. "They were redundant by 2pm the day they were put up. By then the places were filled."

More access courses were badly needed, she said, but to get the funding it was vital to get the figures to prove the demand was there.

SED puts freeze on six courses

by Olga Wojtas
Scottish Correspondent

The Scottish Education Department has caused confusion among teacher training colleges by urging a sudden moratorium on six courses in the coming session.

The colleges had already begun interviewing students for places on secondary courses, following instructions in an SED letter in January which set minimum intakes for different subjects.

However, the latest SED letter says that following estimates produced by the Association of Directors of Education in Scotland on demand for teachers in individual subjects, it seems clear that there is likely to be a very small, or no demand for teachers of history, modern studies, economics, economic history, classics and geology in 1987/88.

The letter comments that the colleges themselves can decide which particular subjects they offer, but goes on to say that if a college decides, after consultation with its local authority, that it should run one of these six courses, it must first discuss the evidence with the SED.

At a time when secondary quotas are constrained, the letter continues, it is important that students who are accepted "should be able to contribute towards meeting the prevailing needs of Scottish schools."

Most of the colleges offering secondary courses have now cancelled interviews, and are likely to accept a fallow year in the six subjects. However, Jordanhill College of Education, Scotland's largest education college may halt the intake only in classics.

The situation has been exacerbated by a change in application dates.

Mr George Livingstone, chairman of the Association of Lecturers in Colleges of Education in Scotland, said the staff involved had made an extensive contribution to inservice training, and the bulk also contributed to primary courses.

THES ANALYSIS

Suddenly last summer

Small consolation for social science departments banned from taking new PhD students because their existing ones have failed to complete on time. The Economic and Social Research Council, which to howls of anguish last year drew up a blacklist of such departments and refused to allocate them new awards, knows a thing or two about meeting deadlines itself.

It turns out the ESRC plumped for its unexpected measure during a brainstorming four days – the amount of time the Deparment of Education and Science gave the council last summer to decide either to do something radical about its PhD completion rates, or face a £1.3 million cut in its budget.

Higher education is famous for its acronyms, some apt (like the Labour Party's HELP), others inpenetrable (like the college principals' SCOPDCIHE). Now comes the self-fulfilling acronym – after last week's cuts-conscious report on town planning, the heads of schools of planning must wonder if it was wise to style themselves CHOPS.

A law unto themselves

The American passion for litigation, currently causing a crisis in the insurance industry, means the law schools are doing very nicely. Even though the number of lawyers in the USA has nearly doubled in the past decade, graduates have no problems finding well-paid employment.

Of 29,269 law graduates answering a recent survey, 92 per cent had found jobs. The majority had gone into private practice, nearly 10 per cent into firms employing 100 or more lawyers. Most are in New York, where the average starting salary for graduates approaches $50,000, although in small towns this can drop to $37,000 (Glendale, California) or even a measly $8,733 (Morgantown, West Virginia).

Smartest of all may be the 3.7 per cent going into practice on their own: one graduate made $100,000 in his first year.

Trad rag

Women students at Aston University have wheedled a fulsome apology from their guild of students by complaining to the National Union of Journalists about the sexist material in the university rag mag. Guild president Joanna Herterich has now explained to the NUJ: "Unfortunately, sexist and racist material in student union rag mags has come to be accepted as a tradition."

There were none of the usual lost property problems at a forensic science conference held last week at Strathclyde University. Some banknotes had been found, the chairman announced, adding briskly that any claimants would be finger-printed.

Sound practice

Sir Keith Joseph may care to note that Edinburgh University was fighting the ivory tower image a quarter of a century ago. An exhibition in the city, celebrating the work of George Anderson whose "supermarionation" creations include *Thunderbirds* and *Captain Scarlet*, has revealed that Edinburgh University developed the voice for Robert the robot pilot of Fireball XL5.

Academics might not be so keen on Sir Keith hearing about former welder Tommy Reid's introduction to higher education when he was elected rector of Glasgow University some years ago. "All these people kept talking about sabbaticals – I thought it meant they wanted to work on Sundays."

UNION VIEW

Lies, damned lies – and DES facts

Academics are appallingly underpaid. They have fared worse under this Government than any other professional group. Ministers score no points by trying to hide the fact behind clever statistical manoeuvring by the Department of Education and Science. They were hoisted on that canard over predictions of future student numbers and had to retract. Will they have the good grace to retract on salaries?

In response to the Association of University Teachers' attempts through parliamentary questions to put the record straight, ministers have reaffirmed the only statistic that ensures they can't actually be accused of downright lies. They allege that since 1979 academic pay has more than kept pace with inflation. Indeed, you are all apparently 4 per cent ahead of inflation levels over that period. This is the Tory equivalent of Harold Wilson's pound in your pocket.

Our evidence shows that university salaries have fallen by 24 per cent since 1979 as compared with the retail price index. We based our figures on the Clegg equivalent salary levels agreed on "the basis of October 1, 1979" but promulgated in August 1980 and paid in two instalments in April and October 1980. The DES, however, have been using the salary rates actually in operation in May 1979 (at the time of the general election) to argue that cumulative settlements between then and April 1984 have kept pace with the change in the retail price index for that period. This is just plain deceitful.

Does the Government now really want to argue that it has maintained the erosion in university salary levels since it came to office in 1979? This surely contradicts the statement in the House of Commons on July 8, 1980 that "the Government do not intend to treat university teachers differently from other people, or in the way they were treated in 1975".

What are the facts? In May 1979 university teachers were halfway through a phased settlement designed to rectify the anomaly resulting from government pay policy in 1975. The salary levels payable in May 1979 were 38 per cent below those which had been awarded by independent arbitration in 1975, an award accepted by the Government as an outcome that "firmly and finally subsumed all claims up to and including October 1, 1979" (letter from the DES dated May 9, 1980).

What do ministers hope to gain from this statistical fiction? Political credibility, for having kept at least one group tied hand, foot and mind to cost-limit frugality? But at what cost? The brain drain seems set to become a flood. What motivation can there be to go on providing the highest quality service when ministers seem to have such little regard for the profession?

We believe ministers can be persuaded to recognize the truth, although we have had to resort to hitting them between the eyes with facts that can't be distorted. The AUT and CVCP have jointly employed PA Personnel Services, an independent international firm of management consultants, to establish the facts by objective assessment. We are in no doubt that they will confirm the worst fears of all those concerned to maintain the continuing quality of our universities. It would be an irredeemable tragedy if ministers choose to ignore them.

Diana Warwick

The author is general secretary of the AUT.

NUS vote blow to Left Alliance

by David Jobbins

The future of the Left Alliance this week hung in the balance as the official Labour Party candidate, Ms Vicky Phillips, safely captured the presidency of the National Union of Students.

Ms Phillips, who is currently vice president welfare and is supported by the National Organization of Labour Students, beat her rival, Mr Andy Whyte, by a clear 407 votes to 296 at the NUS conference in Blackpool.

Mr Whyte, also a member of the Labour Party, stood under the umbrella of the Left Alliance. The alliance lost the presidency to NOLS in 1982 and has never come close to regaining it.

Even up to the eve of the poll, there was considerable doubt about the outcome, with some sources claiming the Left Allience would give Ms Phillips a close race.

But the decisive vote, even with a strong candidate like Mr Whyte, who performed well on the hustings, means that the realignment of the non-NOLS left, which began earlier this year when the Communist students quit the alliance, is bound to accelerate.

Many of the delegates at the conference were attending for the first time and may have been influenced by last week's Marplan poll which put Labour ahead of the other parties in terms of popularity with students.

Vicky Phillips: clear winner

Labour's hold over the NUS executive was confirmed when delegates elected NOLS candidates as treasurer, national secretary and vice president, education. In all cases candidates supported by the Left Alliance were beaten into second place, with only one, for national secretary, a close result.

Left Alliance leaders were plunged into gloom and were privately admitting the umbrella organization, which brings together Liberal, dissident Labour and independent students, was in trouble.

Ms Phillips, 24, was president of the University of East Anglia union before becoming a full-time member of the NUS executive last year. She is only the second female president in the organization's 60-year-plus history.

She said: "I believe Labour is going to get massive support from students at the next general election. The Tory Government have damaged young people to such an extent that there has been an enormous change in attitude since 1983."

Ms Phillips has been a member of the Labour Party and NOLS for more than five years. She takes over from Mr Phil Woolas, who has been president since 1984.

Voters show gender gap

There is a "gender gap" among British voters, with men tending to respond to Conservative appeals and young women are moving in the opposite direction. This is revealed in *Generation and Gender in British Voting*, a study by Patricia Findlay, Stephen Griffiths, graduates of Strathclyde University's department of politics, and Dr Mark Franklin, a lecturer in the department.

Voters born since 1945 do not have the same concerns as their elders, maintains. They are less deferential, authority, less concerned with traditional values such as those favouring law and order, and more concerned with individualistic values to do with freedom and the quality of life.

Welsh contact

The former Labour Prime Minister, Mr James Callaghan, has been appointed president of the University College of Swansea. Mr Callaghan, who succeeds the late Lord Harlech as president, said he hoped the appointment would help him maintain substantial contact with South Wales.

Journal launched

A journal written by academics in the field of artificial intelligence is to be launched in July aimed at filling the gap between research and practice. The *Artificial Intelligence Review* is to be edited by Masoud Yazdani of Exeter University.

Patent service

Hatfield Polytechnic-based *HERTIS*, a library network serving industry, is launching at the end of April a Patents Information Service aimed at commerce and business. It will be backed by the full-time staff of the HERTIS Information for Industry Service.

Jellicoe confirmed

Lord Jellicoe has been reappointed chairman of the Medical Research Council for a further four years from April 1986. Lord Jellicoe, who is 68, is chairman of the British Overseas Trade Board, chancellor of Southampton University, and chairman of King's College, London.

Summer statistics

Newcastle University is to set up a summer school in statistics, in which students can study for an MSc degree over two consecutive summers. It will consist of short courses lasting one, two or three weeks, and will also be open to people who merely wish to learn more about the subject, without taking the full degree course. It is due to start this June and will run until mid-September each year.

APT attack

Ministers' failure to give larger polytechnics and colleges the freedom to award their own degrees has been attacked by the Association of Polytechnic Teachers. Expressing frustration and annoyance at the decision, the APT says: "The Government's response is designed, once more, to protect the interests of the local authorities, the further education colleges and the universities against the needs of the nation and students in the public sector".

Jobs campaign

The "Action for Jobs" campaign, announced by the Government this week, aims to get more people to take advantage of the temporary employment, training, and small business support programmes. More than £1.6m will be spent over the next three months in advertising the programmes and on publicising a booklet describing them. Employment ministers will tour the country speaking to

Single body needed to aid funding

by Patricia Santinelli

The setting up of one transbinary funding body to overcome the total "mess" created by current funding policy is proposed by Mr Derek Lyne, former principal of Bedford College.

Speaking at the annual meeting of the Association of College Registrars and Administrators, held at Seale-Hayne College in Devon last week, Mr Lyne said such a body could finance similar courses at the same level across the binary divide. Research could be funded separately.

Other changes proposed by Mr Lyne was a move away from annual funding which did not allow planning or efficient use of budgets. He also proposed there should be one department of education and training.

Mr Lyne said that the National Advisory Body's funding of advanced further education work seemed straightforward until one realized that by channelling it through local authorities, some levels of funding would reach colleges intact, some would be decimated on the way and some be enhanced by "top up". No one could be sure of what funding each individual college would receive.

Another former principal, Mr Gordon Wheeler, also called for fundamental changes in the education system. But he suggested this was unlikely to happen while various bodies like the Department of Education and Science, the NAB and the Manpower Services Commission were able to make alterations which did not get down to the roots of the matter but overlapped and caused confusion.

The UK system was too decentralized with a myriad of curriculum, financial and legislative bodies to satisfy. The system was divided on the bases of a class/social/wealth structure and the curriculum differed unacceptably across the country.

Mr Jim Deboo, group training manager for Baker Perkins plc, proposed yet another solution. He said what was needed was an overall view with the long-term benefits to students kept firmly in mind and not just the immediate needs.

Dr Rosalie David, director of the Manchester Mummy Research project, with some of her subjects. Crowds are flocking to the new Egyptian Galleries just opened at the Manchester University museum. Dr David has pioneered new non-destructive techniques of examination since the public unwrapping of one of the mummies in 1975.

Diversity pays dividends for Salford University

Within the next two or three years Salford University will devote less than 50 per cent of its resources to traditional forms of teaching because it has diversified so much, the vice chancellor, Professor John Ashworth, said this week.

He told a British Institute of Management conference at the university: "This presents us with an interesting dilemma which we will no doubt face."

In 1985 Salford's income from the University Grants Committee and from student fees was £15 million – the same as in 1980 and therefore a drop in real terms.

But by diversifying the university had increased its total income from £17.9 million in 1980 to £24.7 million in 1985.

At home, Salford had increased its continuing education courses and now had many more overseas students. It also exported its services to the Middle East and south-east Asia and had offices in London and the United States – a new departure for a university.

Professor Ashworth revealed that the university's industrial centre would soon become known as Salford University Business Services Ltd.

"In changing students' attitudes towards industry, the principal role of a university is to demonstrate that change is not only possible but can be exciting," he said.

Stories of big City salaries had made sixth formers turn away from science and engineering towards finance, marketing and accountancy.

A level candidates in mathematics had fallen by 16 per cent last year and physics candidates by 11 per cent. The number of university entrants taking finance and marketing courses had risen by 15 per cent and accountancy entrants by 19 per cent. It was now much more difficult to get bright youngsters to study maths and physics.

Campus brochure woos Scottish tourists

The Scottish universities are spearheading a marketing drive to develop their contribution to Scotland's growing tourist industry.

The eight universities, which already form the Scottish Universities' Accommodation Consortium, have launched a new brochure advertising their residential facilities during the Easter and summer vacations, under the name "CampusHotels".

Mr Sinclair Leask, chairman of the Scottish Universities' Vacation Consortium, said: "In 1985, visitors to our CampusHotels across Scotland topped the 200,000 mark, and our aim is to hit the 250,000 target within two years."

Mr Leask added that as well as bringing much needed additional income to their parent universities, vacation lettings gave a substantial boost to the Scottish economy.

"Between us, we employ over 2,000 staff in the residential trade throughout the year, and we calculate that in 1985, CampusHotel visitors spent around £16 million in Scotland."

The universities have always played an important part in bringing conference groups to Scotland, but other group travel parties, individuals and families now formed a growing part of the business, Mr Leask said.

SUAC points out that as well as offering good quality accommodation at reasonable prices, CampusHotels often provide facilities usually associated with the top end of the hotel trade, such as on-site sports facilities, shops, banks and medical services.

Job choosers need better information

by Maggie Richards

Universities should develop new, closer links with industry to help graduates choose their jobs while employers should introduce new induction procedures.

These are the conclusions reached by occupational psychologist Dr Christopher Mabey in a study published this week of the expectations, choices and subsequent job satisfaction achieved by graduates entering industry.

The research shows that sandwich courses do not help university graduates make the best possible job choice.

Vocational courses within universities, Dr Mabey suggests, should be focused more explicitly on industry – and include the use of lecturers with industrial experience; closer liaison with relevant professional bodies; and intensive pre-employment preparation. Students should also be encouraged to use some, or all of their pre-university and vacation periods to gain first-hand experience in their anticipated industrial field.

Dr Mabey advises employers to limit graduate induction to a few weeks at or near the beginning of employment, with the placement related as closely as possible to the entrant's career intentions. The initial work task should ideally be a project working with older, more experienced colleagues, with closely controlled deadlines and carrying a degree of real responsibility.

The newcomer's superior should preferably be a graduate, or familiar with undergraduate provision, and committed to the development of graduate employees within the company.

Dr Mabey, now an occupational psychologist with British Telecom, conducted his research while a lecturer at Henley Management College. He is also a former lecturer in industrial management at Brunel University.

In examining previous surveys of both graduates and graduate employers Dr Mabey discovered a fairly constant figure of 50 per cent changing jobs within five years.

The evidence seemed to indicate dissatisfaction with intrinsic job features, which in turn suggested that newcomers were seriously misjudging the nature of the job and organization they were joining. Graduates, it also appeared, were more prone to have unrealistic expectations.

To unearth more detailed reasons for the high turnover in initial graduate employment, Dr Mabey questioned the graduate intakes to 20 engineering companies. Six months after starting work the graduates were quizzed again.

The sample was drawn principally from university graduates who had followed engineering and technology courses. They were divided, almost equally, between sandwich training and full-time provision. The employers ranged from two major public companies to a number of smaller private manufacturing firms.

Dr Mabey found that lower job satisfaction was experienced by those graduates who had completed sandwich training particularly where the student had gone on to become an employee of the company involved.

Frequently, sponsored students exercised little or no choice, being contractually bound in a moral or legal sense to return to an organization. The original choice had probably also been influenced by parents.

Graduates into Industry by Christopher Mabey, published by Gower Publishing Co. Ltd. Price £16.50.

Gateway to Industry, 12–13

History BA commendable but flawed

Sheffield City Polytechnic's degree in historical studies is distinctive and intellectually demanding but limits students' learning experience of different kinds of historical studies, an HM Inspectorate report says.

Substantial numbers of students recruited to the BA in historical studies drop out, and in recent years up to 25 per cent have been unemployed on graduating.

Competition for places has become much harder, so the average A level points scores of entrants has risen to almost eight points, but only mature applicants to the degree are interviewed, the report says.

Before coming to the polytechnic, students may not be aware of the unusual nature of the course, which emphasizes theories of history, modern history and European history at the expense of dealing with primary sources, making historical judgements and looking at local or world history.

The course has many commendable qualities, the report says. Staff are well-qualified and enthusiastic; work is marked thoroughly; teaching is good in traditional styles but could use more imaginative materials.

Student work though adequate, tends to express uniform views rather than independent-mindedness.

"The experience of many students is currently limited to taking notes in lectures, making brief contributions to seminars, and reading articles about historical controversies. All students would benefit from a wider and richer experience derived from more methods of learning" it says.

HMI report on Sheffield City Polytechnic's BA in historical studies, available from the DES publications despatch centre, Honeypot Lane, Stanmore, Middx HA7 1AZ.

UCET action on ethnic minorities

University admission tutors to teacher education courses are being urged by the Universities Council for the Education of Teachers to pay special attention to applications from ethnic minority candidates.

UCET's advice, circulated to heads of faculties and departments of education, is designed to help them respond to recommendations made to the 1985 Swann Report. The council also wants admission tutors to have regard to the ethnic composition of the student group when recruiting, subject of course to the normal criteria for admission to professional training.

In addition, UCET says that when recruiting teacher education staff, appointing committees should give close and sympathetic attention to applications from ethnic minority candidates, subject to the normal criteria for academic and professional suitability.

This council suggests too that UDEs should consider getting more involved in access courses – so far such courses have been developed with public sector institutions rather than universities. UCET says departments of education might seek to develop formal working relations with existing access courses or where they do not exist, take some initiative in encouraging their establishment.

Moreover, it says departments might seek to assist the general development of access courses by becoming involved in validation or research activities related to such courses.

UDEs are also being asked to consider how they would cope with students who show a negative attitude towards ethnic minorities and the development of a culturally plural society. Swann had said that this is an important element in assessing a prospective teacher's ability to teach.

As far as developing closer links with ethnic minority groups, UCET says that a crucial area for potential involvement lies in the constitution of the Local Professional Committees.

Jarratt: politicians want results

by Peter Aspden

Universities face an "unprecedented degree of parliamentary hostility" if they fail to respond to the findings of the Jarratt report on efficiency, warned the registrar of Nottingham University, Mr Graham Chandler, at a conference in London.

He told the Standing Conference of University Information Officers that many politicians were looking at universities very carefully, and had already been frustrated by the report not identifying commercial savings. "They will demand results in the autumn," he said.

Universities were also being put under pressure by the University Grants Committee, whose original paper on Jarratt was fairly low-key, but which had recently made more precise recommendations in the form of statements from its chairman, Sir Peter Swinnerton-Dyer.

Mr Chandler said another pressure on university administrations was the quality of the report itself. "Given the time constraints, it is remarkable that it appeared in such a coherent, logical, readable form," he added.

It was no excuse for universities to claim that they were already using many of the practices recommended in the report, and there was little point in being over-cautious or defensive. "In fact, the constitutional powers of senate and council remain relatively untouched and the report advocates devolution rather than greater centralisation."

One of the greatest problems for institutions after they have implemented the Jarratt proposals will be the possible loss of concensus in many spheres of management, warned Mr Chandler.

With fewer people involved in the committee process, groups such as students who lose out on their representation might feel their direct links with the government of the institution have been lost.

The report's espousal of "creative tension" between council and senate was also a potential area of trouble. "It might be claimed that such a relationship might be creative and beneficial in the long term, but harmony has always been more important in universities."

Mr Chandler said the recommendation that a vice chancellor should act as a chief executive was similarly awkward. "It could lead to problems in their relationships with assertive councils. It will need to be worked out very carefully."

Hot air problem: Engineers from the University of Manchester Institute of Science and Technology were asked to resolve a steamy situation when a local dance group who specialize in performing inside a plastic bubble found that condensation was acting as abarrier between them and the audience. Professor Peter Burberry (left) helped find the solution, which was to dry the air with chemicals before inflating the bubble.

Shock urges more efficient PR effort

The universities must do more to ensure their case is heard, according to Mr Maurice Shock, vice chancellor of Leicester University and chairman of the Committee of Vice Chancellors and Principals.

Mr Shock was speaking in an interview with Mr Ray Footman, director of information services at Edinburgh University, in an article syndicated through the Standing Conference of University Information Officers.

Mr Shock said that if individual institutions' public relations were handled sensibly, they could get a great deal of free work done for them through contact with the media.

"But we do need at the centre, a small public relations group which can operate more precisely and speedily than we have been able to manage hitherto."

A principal concern must be to get the message across to "men and women of affairs" in politics, the bureaucracy, industry or education.

There is a need for more effective parliamentary lobbying, Mr Shock added. "Like everyone else, we are absolutely in the dark about the nature of the party and the governing systems that we shall have after the next election. So it is of the greatest importance that we establish and maintain a much wider range of political contacts than we have in the past."

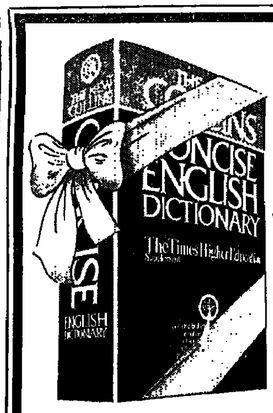
The Secretary of State for Education and Science had said last autumn that there was agreement that quality required a minimum level of funding, said Mr. Shock.

That level had not yet been set, but would have to be set very soon if quality was not to slip badly.

He added that the main aim of the CVCP on the work of the Croham Committee, which is currently reviewing the University Grants Committee, must be to ensure that whatever funding system and method of control is proposed, it must rest on retaining the university as the local point for funding and controlling its own activities.

"Beyond that, everything else is secondary. What the CVCP must ensure is that we do not fall into the trap of having a funding system which begins to split up universities into divisive parts."

He said tenure had become an irrelevant issue. Stressing that he was giving a personal view, Mr Shock said it was now coinparatively rare for anyone to be appointed to a university post before 30. In future they would be asked to do five years' probation, and their appointment would not be confirmed until they were around 35.



The definitive gift –

to new subscribers to the THES. Take out a year's subscription today and we will give you a copy of the hardback New Collins Concise English Dictionary (worth £8.50) containing over 96,000 references.

Simply fill in the coupon and send it to the address shown with your cheque for £33.00 (made payable to Times Newspapers Limited).

The Times Higher Education Supplement

Please send me a year's subscription to the Times Higher Education Supplement. I enclose my cheque/postal order for £33.00 made payable to Times Newspapers Limited.

Name _____

Address _____

_____ (CDH)

Signed _____ Date _____

Please send this coupon, together with your cheque, to Linda Bartlett, The Times Higher Education Supplement, Priory House, St. John's Lane, LONDON EC1M 4BX

Please note this offer is open to new subscribers in the UK only and closes on June 30 1986.

Karen Gold reports from the British Psychological Society

Fears for psychology research

More than 20 chairs in psychology are vacant, frozen or unfilled and over 50 lecturing posts have disappeared, according to a survey by the British Psychological Society.

Psychology is suffering in both the universities and public sector and across the research councils, Professor Anthony Gale, chairman of the society's scientific affairs board, told a symposium on research funding at the annual meeting of the BPS.

"The board is very concerned at the prospect for the future of the psychological sciences and the role of basic research within that future," he said.

Research funding seemed to be threatened by cuts in university and polytechnic funding, the undermining of the dual support system, the deterioration of student-staff ratios, the need to provide for psychology on a quasi-scientific funding base, and the policies, funding and security of the research councils.

The board was investigating the state of psychology in higher education and research funding in particular, he said. It did not yet know how psychological research compared with other subjects in research council allocations, how effective psychologists were in applying for and gaining research money, or the extent to which the research situation had deteriorated.

But psychologists needed to put their own house in order before complaining too bitterly about the research councils, Professor Gale said.

"Our record in submitting good research applications, or indeed any quantity of applications, is not something we can be proud of, nor do we bounce back in the face of adversity as others appear to do," he said.

"Our record in PhD completion rates is not so startling that we can seek a warmer place in the sun than can other disciplines."

Psychology could benefit from the strategic plans of the Medical Research Council, Science and Engineering Research Council and Economic and Social Research Council and it would not be in the subject's interest for psychological research to be funded by only one body.

Portrait of art for argument's sake

Psychology may need the arts, but does art have any use for psychology? Does the gulf between psychology and art represent the division between thought and feeling, reason and imagination?

The questions arose at a British Psychological Society conference symposium on psychology and the arts. For the latter, art historian Professor Sir Ernst Gombrich argued that scepticism was in order in assessing psychology's chance of explaining either the artist – a laudatory term he disapproved of – or why art affected us.

For psychology, clinical psychologist and novelist Dr Donald Bannister argued that the psychologist and artist rarely communicated because of psychology's assumption that thought and feeling were divided – reflected in its own division between cognitive and affective psychology.

Psychology wanted to become a science, so it had disallowed the imagination in order to concentrate on "objective" experimental methods and hob-nob with statisticians. Accepting the division between thought and feeling was "a papering over chaos".

When challenged on why they had not studied artists, psychologists offered "jam tomorrow" platitudes: that the arts were the product of higher functions and they would be dealt with in due course when the lower functions had been explained. Psychologists needed the arts to make more sense of human experience, Dr Bannister said.

But psychology was not much use in making sense of art and artists, Professor Gombrich said: "Of course we can't explain Beethoven. We can't explain our neighbours."

The division between thought and feeling was false, but so was setting up the artist as a creature of the imagination. The idea of the artist exploring his own emotion was one of the 19th and 20th centuries: Van Gogh, when accused of painting while drunk, replied that he might get drunk afterwards but he didn't know how anyone could paint while they were drunk.

Psychology was useful in the visual arts in explaining perception. The complexity of illusion and perspective was how the artist transferred what he saw on to canvas. But understanding art had rested on metaphors of harmony and coherence since Aristotle – even in the simplest description such as a "wavy" line – and psychology had brought us no nearer an objective understanding of art.

On Velusquez Professor Gombrich said: "We just don't know how he did it and what he did but it takes the breath away. Discussion of the psychology of art has given me no more insight than the expression, 'Gosh, isn't that marvellous'."

Prizes that spring no surprises . . .

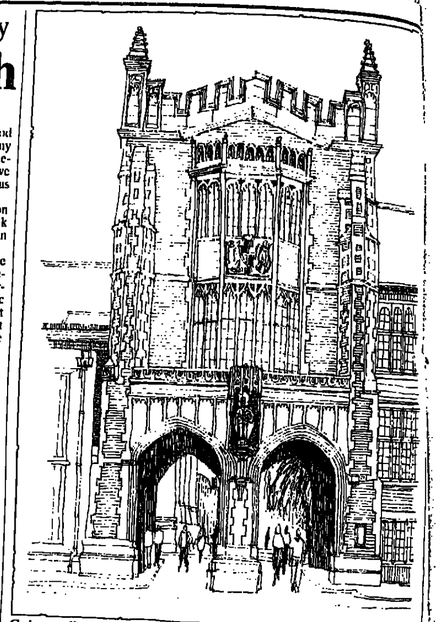
The art of giving prizes, that hallmark of the great educational tradition, reveals common notions of justice and proportionality that cross all boundaries, according to Professor Leslie Reid, of Exeter University's psychology department, in a paper given at the British Psychological Society conference.

Prize giving was on the increase, but the pattern on which committees everywhere distributed their first, second and third prizes was startlingly the same, he said.

Professor Reid asked 65 academics how they would distribute £100 between three prizes and also looked at the distribution of 143 actual prizes for merit.

Both experiments produced near-identical ratios. The academics, after initial reluctance, agreed that more than 50 per cent of the notional £100 should go to the first prize winner, that the second prize should be about twice the third, and that the third prize should be significant.

The real prizes followed that pattern exactly: on average 53 per cent went to the first prize winner, 30 per cent to the second and 17 per cent to third.



Going walkabout: Architecture students at Newcastle University have designed drawings for a new series of walking tour guides for visitors. The university expects an upsurge of interest in its affairs from the general public during this autumn's Channel 4 series on its work and functions, and when it hosts this year's Tall-Ships Race.

Therapy first for Edinburgh

Queen Margaret College in Edinburgh is to launch its first occupational therapy degree course in September.

It is the second course approved at the college in three days by the Council for National Academic Awards, the other being a BSc in physiotherapy.

Mr Donald Leach, the college's principal said the new course marked the transition of Queen Margaret to a predominantly degree-based college, with only one health care course still to be converted to a degree.

"These courses give us a very close relationship with the National Health Service, and we are now in a strong position to move on to develop continuing education provision for the south east of Scotland," he said.

However, he warned that if Scotland's full potential in health care was to be realized, there was an urgent need for the Government to provide the Health Pick Up Scheme which already exists in England and Wales.

Queen Margaret currently has 110 students in its physiotherapy diploma course and 120 students in occupational therapy. It hopes to offer 38 and 48 places respectively for the new degree courses.

Catholics face more closures

Proposals to shut one or possibly two more Catholic colleges of higher education will probably come within the next two years, the chairman of the Catholic higher education committee warned the annual conference of the Catholic Teachers' Federation last weekend.

Speaking at Trinity and All Saints College, Leeds the Rt Rev Daniel Mullins, area Bishop of Swansea was answering a question about the fate of De La Salle College, Manchester, which seems certain to close following the withdrawal of teacher training places and the failure of Catholic authorities to agree on a merger between the college and the Liverpool Institute of Higher Education.

Bishop Mullins foresaw a bleak future for the role of the Catholic church in education. "In the early 1970s we had 16 teacher training institutions. We now have six and none of them can face the future with confidence. I am quite certain that in the next two years at least one and possibly two of those will probably be named for closure."

And acknowledging the declining role of the Catholic church in the rest of the educational system Bishop Mullins added: "If we don't come up with answers very quickly we shall be reduced to primary education only."

He pointed out that in the early 1970s Catholic colleges along with other teacher training institutions were encouraged to diversify. They complied so as to hold on to teacher training places for the future while asking themselves at the same time if that was what they wanted to be doing.

Once teacher training had gone, however, as had happened at De La Salle, the situation was very different. "So long as we say we will continue doing the sort of work which requires 100 per cent funding and that's all we are prepared to consider I don't think we can make a case for staying in higher education."

He told members of the federation, which represents over 1,500 schools, that what the Catholic Church should be about were the sort of priorities which would not attract funds from central government. "Unless we can come up with better procedures than simply responding to crises when they arrive we are going to go on and on diminishing."

Ministers face sporting problem on finance

Ministers want to curb abuse of student union finances by leftwingers but are having great difficulty finding a way to safeguard sporting and leisure facilities.

Sir Keith Joseph, Secretary of State for Education and Science, remains eager to stem excesses by leftwing activists but has met daunting practical objections. Voluntary student union membership – the abolition of what rightwingers have dubbed the "forgotten closed shop" – remains close to the heart of many Conservative students and party stalwarts.

Last year the Government warned student unions that unless instances of *ultra vires* payments to left causes were stopped, a way of separating political from social and leisure activities would have to be found.

But Sir Keith told his critics within the Federation of Conservative Students at Scarborough it was "confoundedly difficult" to give students access to sporting and leisure facilities while restricting other union activities.

"If one removes automatic membership one has to replace the arrangements for access," Sir Keith said.

He was attracted to the principle because of the way it would remove at a stroke the problems associated with the misuse of public money, a number of examples of which have been lodged with the Attorney-General, Sir Michael Havers.

Sir Keith appealed to his audience for solutions only to be upbraided for failing to provide them himself.

FCS conference, page 11

College training 'improves attitudes to women'

by Carmel McQuaid

Higher education has a markedly positive impact on how men perceive the rights and roles of women in Nothern Ireland according to a recent survey.

Questionnaires to 500 men and 500 women selected from the 1985 electoral register and later to 520 professionals, show that those who continued their education beyond the age of 18 have a far more liberal outlook on women's rights.

They were more agreeable to having a woman as a boss and believed that "a woman should be as free as a man to propose marriage", or "girls earning as much as their boyfriends should pay for themselves when going out with them".

On all issues, both social and work-related, professionals had the most liberal attitudes and unskilled workers the most traditional. Professional men were seen to be much less forward-looking than women, while doctors, bank managers, secondary school principals hold attitudes which hardly deviate from the average.

The most liberal views regarding women in work were expressed by personnel managers, followed by solicitors and building society managers. But in every group, women's liberalism far outstripped that of their male colleagues according to the survey by John Kramer and Carol Curry from Queen's University department of psychology for the Equal Opportunities Commission of Northern Ireland.

Women and work gave rise to most differences in outlook. Both men and women agreed it was worse to hear women swearing. Men were not as prepared to accept that women had as much to offer industry.

Any departure from traditional thinking among the men surveyed seems to have definite bounds. "The impression comes through strongly that most men and women still see a woman's first commitment as being to her husband and her children, with work being only of secondary concern," the survey states.

Nearly one in three bank managers and one in 10 males in the other groups saw themselves as having a better chance of further training than women; 30 per cent admitted their chances of promotion were increased because of their sex, and 40 per cent of professional women felt their promotion chances were diminished because they were women.

"These figures are in excess of those noted within the general population and are therefore particularly disturbing as it is often felt that the effect of sex discrimination is likely to diminish within increasing social class," the report states.

Most male professionals and all bank and building society managers reported that the women they encounter at work were in inferior roles. The exception was teachers, where roughly one in four males reported women to be in superior positions. Professions with relatively large numbers of women members, personnel managers, teachers, and secondary school principals, all seemed to include among their female samples the highest incidents of dissatisfaction.

Women school principals seemed the least concerned of all groups about the repercussions of marriage on their careers. Two out of five female professionals, appeared more optimistic about the effects marriage had on women's job advancement, but male solicitors, doctors, bank managers and secondary school principals saw it as a disadvantage.

Young educated women had extremely liberal outlooks, especially on women's role at work. The younger males, by contrast, proved to be considerably less imbued with a liberal spirit. "Below the age of 35 it is difficult to discern any sign of a decrease in the strength of traditional values" the survey states. "Without the liberal lead normally provided by the young, or indeed the middle and professional classes, then traditional attitudes and stereotypes are undoubtedly going to persist that much longer."

Yitzhak Zamir: attorney general

Row over MP's law degree

from Benny Morris

JERUSALEM

An irregular marking procedure in the law faculty of the Hebrew University of Jerusalem has raised a minor political storm which threatens to unseat the chairman of the Knesset law, constitution and judicial committee and to bar the attorney generalship to the faculty's dean.

The affair involves Knesset member Eli Kulas (Likud-Liberal Party), the key committee's chairman, who last year was awarded a BA in law by the Hebrew University and last month was called to the bar; Professor Yitzhak Engelhard, the dean who was instrumental in pushing through Kulas's degree; and Professor Amos Schapira, the former dean of Tel Aviv University's *law faculty*, who helped Engelhard push through the degree.

The problem is that Kulas failed an important examination on criminal law four times which, according to HU regulations up to last year, meant that he could not sit for the exam again, and without a pass mark in criminal law, he should have been ineligible for the degree.

But Engelhard, who was minded to help the student in difficulties, asked Schapira if Tel Aviv University could accept a seminar paper rather than an exam on criminal law from Kulas. Schapira agreed, Kulas received a 90 (very good) for his paper, the Hebrew University accepted the mark in lieu of the exam and Kulas got his degree.

Engelhard until now was regarded as a leading candidate for the post of attorney general, which is to be vacated next month by Professor Yitzhak Zamir. The appointment is in the hands of justice minister Moshe Nissim, one of Kulas's party colleagues. Engelhard has denied that he discriminated in favour of Kulas, saying that such special arrangements for students in difficulties were quite common.

Most observers in Jerusalem believe that the affair has substantially harmed Engelhard's chances to become attorney general, who is the country's chief law officer with cabinet rank.

Meanwhile, the Hebrew University has instructed its inspector general, Moshe Ben-Ze'ev, to investigate the matter and a Jerusalem lawyer, Shmuel Sa'adiya, has asked the attorney general, the state comptroller and the Knesset state control committee to do the same. Professor David Libai (Labour), chairman of the Knesset state control committee and also a law teacher, has said that his committee will indeed take up the matter.

Nothing in law requires the chairman of the Knesset law committee to hold a law degree. But most of Kulas's predecessors have been legal experts, and if it is determined that Kulas's degree was irregularly earned, it seems doubtful that he will be able to retain the chairmanship.

Meanwhile, the two university law faculties remained at odds over what exactly had happened. Professor Schapira reportedly said (though later denied in a letter to a newspaper) that Professor Engelhard had specifically asked him to take Kulas's paper in order to bypass the Hebrew University's regulations. Engelhard denies that his approach to Schapira had been couched in such terms.

The UN appoints its first rector of peace

by Donald Fields

The United Nations Peace University, based in Costa Rica, has appointed a Finn, Dr Tapio Varis, as its first rector.

Dr Varis, 39, has a long record in mass communications and peace research. He made a pioneering study of the impact of foreign output in television programming in scores of countries, and headed the Tampere Peace Research Institute until he was dislodged, apparently for political reasons.

His tours of duty have included appointments in Venezuela and California, and a visiting professorship in Austria. He is now a senior research fellow in the Finnish Institute of International Affairs.

The UN Peace University has been set up by Resolution 3555 of 1980. Though the UN charter and the universal declaration of human rights form its guidelines, it is not expected to be a financial burden on the world organization or its agencies, including the older UN University, and cannot receive money from governments.

Voluntary contributions are partly drawn from various universities extending development aid to education. But the largest single donation – $1 million, roughly covering an annual budget – has come from a Japanese shipping magnate.

Dr Varis told *The THES* that he believes the constitutional and financial frameworks would provide ample autonomy. He did not fear the economic and political pressures that have hamstrung Unesco, partly because the sources of income were diffuse. The Peace University's functions were purely academic, and good working relationships had been forged with universities and intellectuals in many countries.

Teaching staff work for half of each calendar year on three-year courses including the links between peace and communications on one hand, and education on the other. A human rights course is also planned. The time-lag between establishment of the council in 1981 and a start to teaching means that the first master's degrees will not be awarded until 1987.

Staff for the 28 students drawn from 18 largely third world countries have been provided by universities in Canada, Spain, France, Italy and Venezuela. "We are up to Sorbonne or Nanterre standards," Dr Varis said.

And how will the university fulfil its ideal of promoting peace? Its rector predicts that its graduates will move into international organizations, diplomacy, government service and journalism – careers in which they can expand their contacts and vision and show more empathy with poor countries.

Though he acknowledges the university's potential in the lessening of East-West conflicts, Dr Varis sees his work largely in terms of amplifying the North-South dialogue: "I'm from the rich North, and I want to follow the best traditions of freedom and tolerance espoused by the Humboldt University. We are dealing with global problems that concern us all."

Institute to save Africa's environment

by Thomas Land

A scientific research and training institute deploying remote-sensing space technology for the rescue of the rapidly deteriorating African environment is expected to be set up shortly in two components based in Zambia and the Ivory Coast.

The projected Institute for Natural Resources in Africa is planned by the United Nations University with backing from Britain and other Western countries.

Progress towards its establishment and the corresponding co-ordination of scientific work at many African universities indirectly result from the recent big drought and famine which cost many thousands of lives across the continent.

The institute will cost $50 million to establish and $4.5 million a year to run, according to UNU estimates. It will be a pace-setter in the application or remote-sensing space technology in such spheres as long-range resource planning and food production. It is to stimulate training and research, meeting the scientific and industrial needs of some of the world's poorest countries.

Its establishment has been subject to intense and frustrating discussions involving the UNU and various African governments for some years. The UNU planners have always understood the inherent difficulties arising from the classified nature of most information related to natural resources in Africa.

On the one hand, the institute will have to win the support of states obsessed with national as well as commercial security; on the other, it must share specialist knowledge among the continent's various scientific institutions, overriding those very obsessions.

Awareness of the common peril resulting from the relentless environmental degradation over much of the continent may perhaps now help governments to overcome their jealousies.

A resolution recently passed by the Organization for African Unity has urged member countries to co-operate in the formation of the institute sharing knowledge related to land-use, water, plant, animal and mineral resources as well as energy management. And the governments of Zambia and the Ivory Coast have made definite offers to host the institute.

Backing for the project is expected from many countries concerned with the development of the famine belt of the planet, including Britain and the United States. Several international financial and development agencies, such as the World Bank and the United Nations Environment Programme are expected also to support the venture.

Dr. Mostafa Tolba, executive director of the Nairobi-based UNEP, recently told a conference of African environment ministers: "We are concerned with a continent in crisis. Africa is suffering from a continual degradation of its natural resources, including the climate.

"There are still some areas of relative prosperity in Africa based for the most part on the massive export of non-renewable primary resources. But the general degradation has led to the poverty of the African peoples and the lowering of their quality of life."

Famine victims: an undernourished family in Mali

Catholic college heads fight Vatican reforms

from William Norris

WASHINGTON

The presidents of the 235 Roman Catholic colleges and universities in the United States have united to oppose a Vatican proposal to put them under the control of their local bishops. They believe this would destroy their hard-won reputation for academic freedom and might even force some into bankruptcy.

The cause of the row is the proposed draft of a document aimed at Catholic institutes of higher education throughout the world. It places "spreading the message of Christ in the world of culture" on a par with "seeking and disseminating truth" as the objectives of a Catholic college or university.

Local bishops would be given the "duty and the right of seeing to it that the principles of Catholic doctrine are faithfully observed". They could declare a university "no longer Catholic" if "the Catholic character continues to be compromised in a serious way". Faculty members are to be chosen for their "doctrinal integrity and rightness of life", as much as for their academic qualifications.

The Vatican's congregation for Catholic education, which is headed by the former Archbishop of Washington, Cardinal William Baum, began circulating the draft of the document last year, seeking comment from Catholic educators around the world. They were given a deadline of April 30 for their response, but the American presidents, who represent 40 per cent of all the Catholic colleges and universities worldwide, have not waited. They have already fired off a 12-page critique to Rome.

This says that the proposal for church control of colleges is totally at odds with the standards of American academic accrediting associations, which require that full control be vested in the schools' governing boards. "Several court tests," the presidents add, "make it clear that the favourable decisions regarding public aid to Catholic colleges or universities are founded on a perception by the court that the church does not control them."

Loss of accreditation would mean serious financial loss. Students would no longer be able to claim federal or state loans for their tuition, and the institutions would lose state and federal grants which currently total more than $500 million a year.

The Rev. William McInnes, president of the National Association of Jesuit Colleges and Universities, said: "If this went through in its present form, it would undo two centuries of struggle of Catholic education in this country . . . we would be discredited in the eyes of the university world."

Tamil war means no rises this year

from D. B. Udalagama

COLOMBO

Apparently the last official word on the pay claims of Sri Lankan academic staff which have crippled the work of the science faculties of three universities has been spoken by President J. R. Jayewardene, who is also the minister for higher education.

He chose a meeting of a progovernment union of the universities' non-academic employees to announce that there will be no salary increases for public sector employees this year in view of the heavy defence expenditure (put at 800 billion rupees for fighting Tamil separatist militants). But the government hoped to grant an increase in salaries next year.

President Jayewardene's only actual reference to the universities was to say that he would do his utmost to solve the problems of lecturers.

The academics' protest began at the Colombo science faculty last month when the dean and heads of departments resigned their voluntary posts. Their counterparts at Kelaniya University subsequently submitted their resignations but the vice chancellor, Professor I. Balasuriya, was reported to have declined to accept them. Since then the science faculty at Peradeniya has followed suit.

Though it may be taken for a fact that the discontent of the academics arises from poor pay, they have been careful to insist in their statements that on this occasion no demands whatever had been made by them. Rather, they attributed their protest to their inability to recruit staff of the right calibre and concern for the quality and standard of teaching in the science faculties.

Meanwhile, the finance minister, Mr Ronnie de Mel, who was awarded an honorary degree by the Ruhuna University, had some sound but, in local conditions, impractical advice. He called on the universities to generate their own resources.

Mr de Mel said that unlike in Western countries, the entire funding of universities in Sri Lanka was by the state. No government could guarantee a regular commitment, so universities must make every effort to raise additional revenue, of their own.

Pay boosted by oil crash

At a time when, thanks to falling oil prices, the cost of living in the United States has started to go down, faculty salaries are rising. A new survey by the American Association of University Professors shows that the average faculty member now earns 6.1 per cent more than he did last year – the fifth year in a row in which salary increases have outpaced inflation.

According to the author of the report, W. Lee Hansen, all this has been due to the improved national economy, which has eased the financial problems of colleges and universities, particularly the public institutions. For only the second time since 1975, salary increases in the public sector have been at least equal to those paid by private universities.

The average full professor now earns $42,500 a year. Associate professors get $31,800, assistant professors $26,240 and instructors $20,350. At doctoral institutions, full professors can expect to be paid around $57,000 annually, while at comprehensive universities they earn an average of $45,700.

College administrators, on the other hand, did relatively less well in the last pay round. The College and University Personnel Association reports that their salaries increased by only 5.3 per cent on average, though chief executive officers and executive vice presidents managed to net 7.7 per cent.

The highest-paid administrators on campus, for the second successive year, are the deans of medicine. They topped six figures for the first time, drawing down an average of $105,000. Deans of dentistry came in second with $87,450. By comparison, university presidents are earning only $65,900.

overseas news

EEC acts to speed research

from David Dickson

BRUSSELS

The Commission of the European Communities in Brussels is preparing to speed-up decision-making on research programmes and avoid a block by a single member state.

The streamlining was among a list of amendments to the Treaty of Rome which were agreed by EEC heads of state when they met in Luxembourg earlier this year and have now been ratified by all 12 member states.

Previously, the treaty contained no explicit reference to joint research activities financed by the commission apart from those in the field of nuclear research, which are covered by the separate Euratom treaty. As a result, all projects paid for out of a current annual budget of £450 million were labelled as "other activities" of the commission, and had to be approved unanimously by member states.

Delays in reaching unanimous decisions, however, have been a constant source of friction. The commission claimed that it was deprived of the ability to react quickly to new research needs, while the lengthy procedures involved have been one of the reasons that some countries, particularly France and West Germany, have suggested by-passing the commission for the organization of the research programme Eureka.

Under the new rules, a unanimous decision is only required on a "framework programme" which will be agreed at the beginning of every five years. The commission has recently put forward such a programme for the period 1987–91 inclusive, suggesting that its research activities be allocated a total budget of almost £5,000 million over this period.

The framework programme will set out broad research objectives and financial limits. Once it has been adopted by the council of ministers representing the member states, individual programmes compatible with both of these can then be approved by a "qualified majority".

This refers to a weighted voting system, the number of votes a country can cast being determined by various factors such as its size and the average income of its population. In practice, this means that it will take three countries to block a particular programme supported by the commission, and more if the only opposition comes from the smaller countries.

According to Dr Paolo Fasella, head of the commission's directorate for science, research and development, the new procedures should make the administration of research more efficient and more effective.

Dr Fasella says that there are two important implications of the revisions agreed in January. "The first is a political message, the formal recognition that science and technology are now essential aspects of European integration – the second are the administrative implications which show that the political will is there to put things into action."

According to Mr Herbert Allgeier, a member of the cabinet of industry, and research commissioner Karl-Heinz Narjes, a five-year programme which represents a firm commitment "provides the type of planning certitude that we need when discussing joint research projects with industry".

The new procedures will also involve the European Parliament – the body responsible for overseeing the budget of the commission – with a more direct input into individual research programmes.

Previously, it was only able to give its opinion to the council of ministers on the commission's proposals. Now, however, it can suggest changes which, if agreed with the commission itself, can only be rejected by a unanimous vote of the council.

However, officials point to what they describe as a *vide juridique* – or legal hole – caused by the fact that under the Euratom treaty, which has not been amended, all decisions concerning nuclear research still have to be agreed unanimously. They fear that a single country wishing to block a programme could use this as a lever.

Shift sought to local power

from Donald Fields

HELSINKI

Amid growing evidence that staff shortages and spending cuts are eroding Sweden's higher education standards the education minister, Mr Lennart Bodström, has called for more autonomy for universities.

Mr Bodström, demoted from the foreign ministry in what turned out to be Mr Olof Palme's last reshuffle of his Social Democratic government, has ordered that ways be studied of transferring control of the allocation of funds from the Riksdag (parliament) to universities and other centres of higher learning.

At the same time he wants to reduce the power of buffer-like boards at national and regional level. Norway maintains a similar university system without having such intermediary bodies.

Time will tell what form the Bodström reforms will take. But it is once again interesting to see Sweden's Social Democrats, widely identified with centralization in so many spheres, advocating devolution through a shift in the respective roles of bodies administering the universities.

The minister himself outlined his thinking on "debureaucratizing the universities" in a 2,000-word article in *Dagens Nyheter*. He urged more decision-making power for each university, with the Riksdag and the government there to devise a framework in which such local freedom could be developed.

Mr Bodström recalled that the administration of higher education had been subject to the general 2 per cent annual cutbacks required to wipe out the fiscal deficit, while teaching and research had been exempted. While he welcomed the resultant reduction in red tape, he observed that teachers in some institutes that had shed full-time bureaucrats had been obliged to take on new administrative tasks.

Extolling a "simplification of state supervision", Mr Bodström wrote that universities could be exempted from overall regulations they believed were a handicap to better work. Deviations from rules that produced a more effective administration as a prop for teaching and research were to be encouraged.

The minister has been busy in other spheres. Rounding up a "campaign week" designed to restore quality to higher education, he admitted that Swedish students were less prepared than before to undertake research because basic teaching had been relatively neglected. He did not see any particular need to regulate sprouting forms of privately financed higher education provided these complied with the aim of good education and research.

Meanwhile, five institutes within Stockholm University say that spending cuts have hit the quality of teaching. Their views are contained in a report by the students' union, which blamed the deterioration on problems in recruiting qualified teachers, more bureaucracy and worse student finances.

"Bigger classes, less instruction" was the most visible sign of cutbacks in the eyes of students.

The institutions examined covered art, archaeology, jurisprudence, natural sciences and psychology. To take two random examples: archaeologists are prevented from working in the field because the number of days set aside for excursions has been halved; and with annual outlays reduced to 5,000 kronor (£475) per undergraduate and lecturers rarer and more overcrowded, a mere 23 per cent of law students have sat finals after being enrolled for six-and-a-half years.

Republicans clash on student aid

from William Norris

WASHINGTON

A massive snub has been delivered to the Reagan administration, in its efforts to cut spending on higher education, by the influential Senate labour and human resources committee. Completely ignoring 11th-hour proposals from the education department which would have slashed student aid programmes, the Republican-controlled committee gave unanimous approval to its own version of a bill to reauthorize the higher education act of 1965.

"I don't agree with the administration's plan," said committee chairman Senator Orrin Hatch, who is not renowned for his liberal views. He described the proposals put forward by education secretary William Bennett as "too late and too draconian". "Frankly, there is only so much blood you can take out of these folks," he said.

Senator Hatch had been under pressure from the administration to delay consideration of the reauthorization until April, to give time for Mr Bennett's views to gain support. He refused.

The committee's bill, which now goes before the full Senate for approval, authorizes the spending of $9.7 billion for the 1987 financial year. This is $1.1 billion more than the appropriation for the current year, and nearly $3 billion more than the Reagan administration wanted to spend. It increases the maximum Pell grant for students by $200 to $2,400, raises the guaranteed student loan limit, and requires students to have a C average to qualify for aid.

The Democrat-controlled House of Representatives has already passed its own reauthorization bill, which would involve spending $10.6 billion. If the Senate measure survives administration attempts to gut it on the floor of the house, there will have to be a compromise between the two before it can become law, but the gap is not thought to be so wide as to be unbridgeable.

The bill has been broadly welcomed by the higher education community. Charles Saunders, vice president for governmental relations with the American Council on Education, said after the vote that his members would work diligently to see that the bill was passed before the senate was struck by budget-cutting fever late in the session.

Peter Gossens, director of governmental relations with the National Association of Independent Colleges and Universities, said: "Private colleges are going to support the bill. We would like to get it to the president as soon as possible so that our institutions can do their planning."

But official reaction to the Senate committee's move has been distinctly cool. Bruce Carnes, deputy undersecretary for planning, budget and evaluation at the education department, added up the sums and declared that in fact the bill would authorize $11.2 billion – a figure at variance with the documents. "It's too costly," he said. "We think this sum is neither realistic nor necessary."

Mr Carnes took particular exception to a clause in the bill which would allow Peace Corps volunteers to have their loans under the national direct student loan scheme cancelled. This would discriminate against students who went on to join the forces who would enjoy no such privilege, he said.

Maybe this is an expression that the committee believes the peace corps is more important than the military." In the current mood of the Reagan administration, that would be heresy indeed.

Senator Hatch (left) on Secretary Bennett (right): "His proposals are too late and too draconian"

Old age threat to 'new blood'

A new bill before Congress would abolish the mandatory retirement age for all private-sector employees is causing grave concern on American campuses. At present a mandatory retiring age is 70, and an earlier attempt to scrap it – now defunct – had included a 12-year exemption for higher education.

This time, under a measure introduced by Congressman Claude Pepper, there are to be no exemptions and the bill is gathering strong support on Capitol Hill.

The American Council on Education (ACE) and 10 other higher education associations are protesting. As Robert Atwell, ACE president, points out that abolition will allow tenured faculty to remain at their posts indefinitely, blocking the way for new entrants.

In a letter to Congressman Pepper, Mr Atwell writes: "Colleges and universities maintain that they must have a healthy representation of relatively new faculty members if they are to combine to be effective centres of teaching, learning and scholarship. Unless enough faculty positions continue to be available for new appointments, we run the serious risk of creating a static situation for nearly two decades ahead."

The problem of new faculty openings is already acute, owing to the spurt of college expansion in the late 1960s and early 1960s which brought in many professors who are now in their 50s. Even under the current law they will not have to retire until the end of the century, and this, combined with a reduction in enrolments, has led to the prospect of no more than 100,000 academic positions to be filled during the 15-year period from 1980 to 1995. In the five years from 1971 to 1975, itself regarded as a lean period, 60,000 positions were filled.

There is also the question of pensions. The Independent Commission on College Retirement, in its first report, claims that a fixed retirement date is the cornerstone of the tenure system.

The American Association of University Professors (AAUP) claims that abolition of the mandatory retirement age would violate academic freedom. It could, says Mr Richard Benjamin, AAUP general secretary, force institutions to adopt their own policies of having to determine whether a faculty member was "sick or incompetent". He adds, "there would be pressure to change the whole system."

Nevertheless, both the major teachers' unions, the National Education Association and the American Federation of Teachers, oppose a retirement cap for the tenured faculty on the grounds that it discriminates against professors over 70. The AFT represents 83,000 college faculty, the NEA 70,000.

Poland's election gesture

Poland's minister of higher education and science has renounced his right to monitor the election of university pro-rectors and deans.

But Dr Benon Miskiewicz's gesture is, however, less magnanimous than it might seem. His renunciation refers to 21 universities and colleges only, less than 30 per cent of Poland's higher education institutions, which were selected on the grounds that they showed a proper degree of "socio-political stability".

According to a recent underground report on science and higher learning in Poland, this is "self-government for those who do not wish to be self-governing".

The minister's gesture, however, is clearly intended to allay concern in the universities about 1985 amendments to the higher education act, which gave the ministry of science and higher education unprecedented powers of administrative and disciplinary controls over the universities.

Universities learned of the proposed amendments only from a "confidential" draft of the bill leaked to underground Solidarity. Referendums in every university revealed overwhelming opposition from staff and students alike but the minister dismissed this as "unrepresentative" of the university community and pushed an even more draconian version of the amendments through parliament.

Since the amendments became law, Miskiewicz has made considerable use of his powers, first to dismiss more than 70 democratically elected rectors, pro-rectors and deans, and then to interfere in the election of new delegates to the Main Council for Higher Education – the 70-person representative negotiating body of the universities.

In an interview with the official press agency PAP, he explained that the renunciation would reduce "external interference" in the universities, the possibility of which had been "unfavourably received" by the academic community.

Anger over axed research

Verbal sparks are continuing to fly in Sweden following the axing of a sociology research project known as Metropolit that monitored the lives of 15,000 natives of Stockholm.

The project leader, Professor Carl-Gunnar Jansson, has described as "grotesque" the fact that the people under study could deprive him of material he has worked on for more than 20 years. "It is fantastic that they think they own information on themselves," he said. "Research should not defer to the data laws."

Another member of Stockholm University's sociology department, Professor Walter Korpi, said it was unworthy for a democracy to allow the state to censor research. Researchers were in effect forbidden to use the methods pursued by journalists. He believed a way could be found of combining free research with a protection of privacy.

The assassination of Olof Palme has blunted the public outcry over Metropolit. Nevertheless the Swedes have reacted far more strongly than has Danes and Finns following revelations on research based on official data banks in their respective countries.

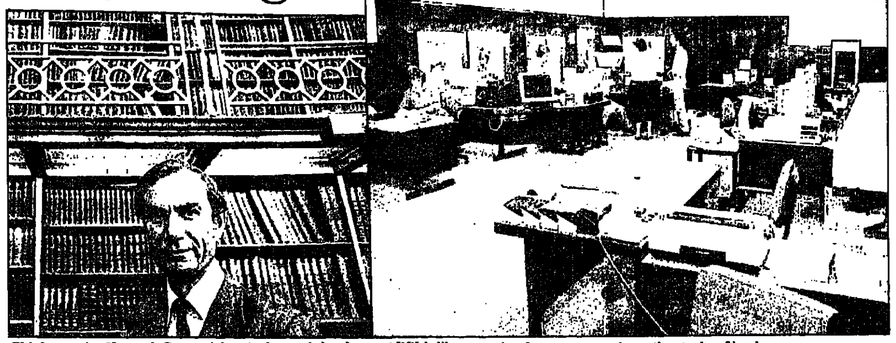
Perhaps the most measured assessment of the overall mood came in an editorial in *Dagens Nyheter*, the first newspaper to highlight Metropolit's practices. This spoke about the conflict between the researcher's desire to expand knowledge and the individual's wish to maintain personal integrity.

Mr Jan Freese, outgoing director general of the Swedish Data Inspectorate, which ordered Metropolit to be abandoned, believes 100,000 personal registers exist in the country. He says the inspectorate has kept in grip on sensitive data even though it did allow Metropolit to function for so long.

When the public protested against Metropolit he was adamant in insisting that the key files be destroyed. The minority on the inspectorate's board when the decisive vote was taken accused Mr Freese of being undemocratic.

Quartet's key change

Patricia Santinelli on the British Library project to advance computerized information systems



Chief executive Kenneth Cooper (above): electronic hardware at BL's library technology centre replaces the stacks of books

Academics' lives have been revolutionized by three developments, according to Kenneth Cooper, British Library's chief executive – jet travel, direct telephone dialling and photocopying. What BL is now planning, he says, with the launch last month of Project Quartet, is a revolution on a much larger scale which will improve the speed and efficiency of digital information exchange for researchers.

"This is the development of electronic information networks which are going to replace the printed word, manuscript and in some parts the spoken word. The potential for change is enormous," Mr Cooper said.

To this end BL's research and development department has awarded around £800,000 over three years to a major collaborative research programme being undertaken by the four Quartet institutions, University College London, the universities of Birmingham and Loughborough and Hatfield Polytechnic.

Their job will be to develop a single integrated information and communication system bringing together existing research into computer networking, mass data storage and retrieval – in the form of text, pictures and graphics – and visual display techniques. These will function so as to provide electronic messaging, computer-based conferring and database access and document delivery.

Bill Tuck, the co-ordinator points out in a report on the project that in each case the intention is to extend the range of functions available in these three areas to include data types other than simple text and to experiment with different mechanisms for structured information access.

"Novel approaches to presentation formats and to data organization will therefore form some of the core experimental aspects of the project," he says. He adds that to integrate all these components into a unified system will require a considerable degree of commonality, in the work stations, networks and storage systems, together with the software and protocols for intercommunication.

Research will also involve the development of electronic work stations from which users will be able to access large stores of information and communicate with other researchers.

There will be a series of experiments on the systems developed and users' reactions to them. These will be conducted using researchers from subject fields outside information technology and computer science so that the value to the research community as a whole can be determined.

Each of the institutions participating in the project has already built experience and expertise relevant to the project. UCL has been primarily involved in the design of computer-based messaging systems and data transmission.

Birmingham and Loughborough were partners in the recent Electronics Network Development (BLEND) while Hatfield has for many years been involved in the study of optical disc storage systems.

Professor Brian Shackel, professor of human sciences at Loughborough University and a leading light in BLEND, says that they learnt a great deal from the project. Between 1980 and 1984 it aimed at assessing the cost, efficiency and subjective impact of an electronic information network, as well as exploring and evaluating various forms of communication. One of the fundamental lessons which emerged was that to read journal or text on screen you must have better facilities than exist at the moment.

"For example we have to have better methods of scrolling. At the moment the effect is just like one long Dead Sea scroll," he said.

Moreover he pointed out that we all took for granted the basic unit of information – the page. "We do not question it but when you try to put journals in an electronic form, you come up against the question of what is the electronic page," he said.

Quartet, he said, had three broad aims. One is the study and evaluation of new information technology developments as potential aids for information exchange in communities of scientists, scholars, libraries and other information scientists.

The second is to extend, test, integrate and improve information technology facilities, so as to demonstrate on a test bed the type of work station needed by scholars as we move forward to exploit the development of IT.

"So our purpose is not only to validate existing technology and humanize it, but to try and push frontiers," Professor Shackel said.

He refuted any suggestion that the funds available to the project would not be sufficient to achieve this, and that they would be overtaken by companies prepared to spend millions.

"We are going to try and crack the problem by thinking. Throwing money at a project will not necessarily provide a faster solution. Fifty thousand pounds a year in one institution enables a lot of thinking and quite a lot of experiments."

Professor Shackel stressed however that new technology was useless unless it could offer more than existing technology. We needed to know much better how to help scholars do as well as they do with paper.

Next one should examine how to provide new facilities – for example a "roving eye". At the moment we have the A4/A5 page as a familiar medium for journals. But most screens cannot display the whole format.

Another aspect is communications at speed humans require. Present systems are not fast enough. "For example there is no way at present you can emulate the speed at which a person can search through a book. Basically we need to speed search facilities by four to eight times to match human requirements," he said.

In his report Bill Tuck points out that current wide area network services perform poorly even for simple text facilities such as BLEND.

"To some extent this is outside our direct control as it depends on the quality of the telephone lines, modems and so on. For this very reason it may be necessary at first to stimulate the underlying wide area communication service by using local area networks," Mr Tuck says.

Bill Tuck points out that tools for on screen reading and browsing will be the first areas to be investigated. Another important component was designing systems independent of the viewing space or the display terminal. They would also examine techniques for scaling or degrading images so that they could be presented on screens of different resolutions.

Right again . . .

David Jobbins finds this year's FCS delegates better behaved than last year but still aiming to create a stir within party ranks

Chairman John Bercow and T-shirted delegates at the FCS conference

"Don't mess with FCS" – the slogan on T-shirts worn by some delegates to last week's Federation of Conservative Students' conference – gave an uncompromising message to their political opponents.

Those "enemies" are to be found as much within the Conservative Party as in the Labour Party and other groups vying for the student votes.

The eyes of the parent party were firmly on the Scarborough conference for any sign of a repeat of last year's Loughborough fiasco which inflicted a severe dent in the party's public image.

The conference was more restrained than any for several years – but the deep divisions between the ruling libertarian faction and other political strands within the federation were readily apparent.

Early on the first full day, the federation was in open conflict with the parent party, insisting that a commitment to work within student union organizations should be dropped from the constitution. The FCS leadership's failure to do so was a key criticism of last year's investigation – and attempts during the subsequent constitutional review to free local associations to choose whether to take part ended in failure for the right.

The move this time won the necessary two-thirds majority – but it is not clear whether it will be endorsed by the national union, which governs FCS affairs. The debate epitomized the divisions, with the libertarians pointing to the success of Conservative associations already working outside their unions, such as Essex and Leicester.

In response the moderates blamed concentration on causes such as free-dom fighter/terrorist groups like the Contras and Frelimo for the FCS's poor image with students, and argued that bread and butter issues should top the agenda.

They lost that – and virtually every other – vote, even if it was clear that they won the argument in the eyes of the Central Office top brass in pin-stripe suits who were overseeing affairs.

Their strategy was straightforward. The venue was shifted from a campus setting to a quiet conference town, and delegates were dispersed among the self-catering holiday flats and seaside boarding houses to minimize the risk of inter-night confrontations between the warring factions.

And the FCS leadership was left in no doubt that the federation was on probation. Even the most committed libertarians on the national committee were to be seen desperately seeking to stem the noisy barracking of the few of their opponents.

The tone set was contrary to an appeal by the archetypal political mugger, party chairman Mr Norman Tebbit, who in a three-minute taped message at the beginning of proceedings, warned against factionalism.

Mr Tebbit's message echoed the internal inquiry into Loughborough, which found evidence of excessive factionalism. But it was clear from last week's conference that the libertarian right is determined to continue its crusade to exterminate the traces of moderation remaining in the federation.

Leaders of the campaign to dislodge the libertarians arrived in Scarborough convinced that they had the votes to run their opponents close. But they came away disappointed, defeated by the fatalism of 50 of their supporters who possibly anticipating defeat simply failed to turn up.

Their candidate for chairman, Mark Francois, was defeated in a straight fight with the libertarian John Bercow by 197 votes to 123. And the right went on to gain all the places on the national committee elected at conference, reduced to five in an attempt to curb the power of the libertarians after Loughborough.

Among those elected was Robbie Gibb, brother of a former committee member who resigned two years ago in the aftermath of a row over irregular nomination papers for delegates to a National Union of Students conference. Mr Gibb's eligibility to stand was reviewed by an internal investigation after it was discovered that he was working for a biscuit company while waiting to retake examinations at Reading University. Party officials were concerned that there might be a repetition of the scandal involving one of last year's vice-chairmen, Douglas Smith, who was found not to be a *bona fide* student. Also elected was "Wee" Harry Phibbs, a formidable right winger who achieved notoriety as chairman of the Westminster Young Conservatives and is now a student at City and East London College.

The right anticipated throughout last year's constitutional review that the effect of reducing the national committee places elected from conference would squeeze out their opponents. In turn the moderates believed that the inclusion as full voting members of the chairmen of the FCS regional organizations would leave them a toe-hold.

But after Scarborough, that toe-hold looks highly tenuous. Most of their support is concentrated within the large associations at Oxford, Cambridge, Birmingham, Bristol and Southampton. Speakers opposing the libertarian line came almost exclusively from the Oxford delegation and there was no attempt to disguise the contempt in which they were held by most delegates.

The FCS leadership is convinced it is destined to be the powerhouse of Conservative thinking. Many of the libertarians' tactical weapons are stolen from the Trotskyite left, and the mode of address used at Scarborough was one rarely heard in Tory circles – "Comrade".

If the senior party figures were happy the conference failed to match last year for media attention, other worries emerged which may be more difficult to handle. Delegates came out firmly against the Anglo-Irish agreement despite the party's clear view that it should be supported.

And Sir James Goold, chairman of the Scottish conservatives, mentioned another embarrassment – the Marplan poll commissioned by the National Union of Students which showed the Conservatives trailing badly in student popularity.

He told delegates that Conservative support among students had to be won back, a theme taken up by Mr Ian Picton, chairman of the Tory Reform Group. Mr Picton, whose TRG is blamed by libertarians for many of the difficulties within the party, was greeted with FCS's time-honoured disruptive tactic of loud and frequent applause last used against Edward Heath, the life patron until the office was unceremoniously abolished.

Deprived of the chance of rounding on their arch enemies, the Young Conservatives, whose chairman, Mr Richard Fuller, failed to make the trip, delegates rounded off the conference with an enthusiastic welcome for Mr Leon Brittan before returning to their crusade.

GATEWAY TO INDUSTRY II: John O'Leary finds that small can be beautiful for graduates

Fastening on to a firm future

First-class honours graduate Alison Good (above and left) ended her sponsored trial period at the Chesterfield firm run by Bill Speirs (above) with promotion to export manager.

It is small business, we are told, which is to be the engine of economic recovery and a palliative at least for mass unemployment. Firms are setting up by the thousand each year in every branch of industry and commerce. But this has never been fertile ground for higher education: costs have to be pared to the bone and there has been little need felt in most small businesses for graduates' skills.

Now that is beginning to change. Many universities, polytechnics and colleges are encouraging local firms to make use of their expertise, and the trickle of graduates taking jobs in small business is turning into a regular flow, even if it is far from a torrent as yet.

Much of the activity is in the high technology field, where small companies come and go with bewildering rapidity. There the need for computer-literate graduates and access to the latest research is ever more pressing with each new phase of product development. But collaboration with higher education is spreading to wider areas than this.

A classic example is to be found in the unprepossessing premises of Stainless Steel Fasteners, on an industrial estate on the outskirts of Chesterfield. The company is more receptive than most to the employment of graduates and the promotion of contacts with universities and polytechnics because its managing director, Mr Bill Speirs, has had fruitful experience of higher education himself. He took an engineering degree at Birmingham University, followed by a diploma course at the Manchester Business School, and he attributes much of his subsequent success to the knowledge and training he received then.

Not that the attitude which has produced five graduates in a workforce of 60 owes anything to sentiment. Mr Speirs is a hard-headed young businessman who runs the company with the minimum of frills. Turnover has increased threefold in five years without expanding the number of employees. Instead, the tea trolley has been replaced by coffee machines and the tea lady now works on the shop floor; there is no longer a telephonist or receptionist, and there is positively no room for anyone who does not make a wholehearted contribution to the success of the operation.

Graduates generally do not find it easy to fit into such an environment, but those who do, soon become extremely valuable. Nuts and bolts – SSF's business – may seem a pretty basic commodity but high precision is required in their manufacture and there are crucial changes which a highly-trained person can spot to increase production. Similarly, there are gains to be made on the business side from employing better-qualified staff.

However, there are drawbacks, too. Most graduates, says Mr Speirs, experience trauma when starting work, finding it difficult to come to terms with strict timekeeping and inflexible deadlines, as well as encountering scepticism or even resentment among other workers. "In a small firm, everyone knows if you are not there at eight o'clock," he says. "At university, if you miss a lecture no one notices; if you don't meet a deadline for an essay, nothing happens; it's not like that here. Language can also be a barrier: it takes time to get to know the jargon which you need before the other workers think you know what you are doing."

When you are a woman and a first-class honours philosophy graduate to boot, the obstacles obviously become even greater, but Alison Good, now the company's export manager, overcame them all. Mr Speirs admits that he would not even have interviewed her if she had applied for a job in the normal way. "She was practically unemployable," he says. But she came for a trial period via Sheffield University's Gateway scheme, which uses Manpower Services Commission sponsorship to place graduates in small, local businesses.

Neither the graduate nor the firm has any say in the matching of applicants to employers, which is why Alison and SSF found each other. Since the scheme is intended primarily for graduates having difficulty finding employment, most of the participants have degrees in non-scientific, non-vocational subjects. The MSC pays their wages for six months, as well as funding a two-week residential course before the period of employment starts, and then both sides can decide whether the experiment justifies permanent employment.

In Alison Good's case, Mr Speirs was so impressed with her efficiency in organizing an overseas sales tour for him that he not only gave her a job, but also created a new post of export manager. The scheme gave her a clear picture of the versatility required in small business since she operated as Mr Speirs' personal assistant. "One day I was packing bolts if they were short-staffed and the next I was going out looking at possible acquisitions," she says.

"In the end, I felt a bit that I wasn't getting anywhere, but now I am specializing in exports I am enjoying it and I intend staying for a while before perhaps moving on to a bigger company in the same sort of field."

At Hull University, she had her sights on an academic career but, about to embark on postgraduate study when she decided it was not for her. Others on her course went for the usual milk round interviews and joined multinational companies, but she is the only one who even considered small business. Now she is studying she does is on a part-time course for the certified accountancy diploma, although she still reads her philosophy at home.

The other graduates employed at SSF are not from quite such unlikely backgrounds, although the latest to join has a degree in English rather than anything technical. He is carrying out market research – another new post for the company, which will be expected to pay its way before too long. The company secretary, aged 24, is a non-graduate and two more are engaged on quality systems and test certification work.

The company also takes in undergraduates for work experience from a number of universities and polytechnics, and they too have made their contribution. One engineering student, for example, was set to work on a machine carrying out a repetitive task for as long as it took to come up with a cost-effective modification to increase efficiency. He then had to time the materials, make a presentation and go to the board to secure approval for the expenditure and carry out the modification. It involved only the addition of a simple shute, but Mr Speirs insists that it was a valuable exercise for the student and a lasting benefit for the workers who normally operate the machine.

Partly as a result of the contacts made in the relevant areas of higher education through the arrangement of such placements, SSF is also able to consult university or polytechnic academics when an intractable technical problem arises. The company's processes are sufficiently well established that this is not a regular occurrence, but the reception, especially from the polytechnics, encourages further contact when necessary.

Mr Speirs believes that most small businesses would gain from a similar level of involvement with higher education, but the typical attitude is one of complacency. He has his criticisms of attitudes within higher education as well, accusing graduates of unrealistic salary expectations, for example. "Initially, they are not worth as much as they think," he says. "They make a lot of mistakes. I am very selective interviewing and put people in on a trial period at a low salary with a three-month review. But there are people here earning twice or three times what they started on – that's the flexibility of small business.

"I have worked in big business and it bored me to tears working in a job which seemed completely irrelevant. You have to be a certain type of person to enjoy small business, but there is plenty of scope for graduates within it."

Out on their own and learning to survive

Most of the 145,000 students who graduated last year found jobs in large firms, the public sector or the professions. A sizeable proportion went on to take other courses and there was still a significant element of unemployment, but fewer than 1,000 went into business on their own.

This is hardly surprising, given the risks involved and the difficulty of raising the necessary capital to provide a sound start. But it is a much lower figure than the equivalent in the United States, Japan or West Germany, where there is a stronger tradition of going it alone straight from university.

A number of possible explanations have been offered for this phenomenon, including a prevailing ethos in British higher education which does not value, much less foster, entrepreneurship. But perhaps as significant an obstacle is the shortage of relevant business training for those who do want to take the plunge.

One initiative designed to put this right began a year ago at the Cranfield School of Management and recently held an exhibition in the City of London to display the wares of 25 graduates from the first course. Their ventures range from a party planning agency to a legal software company, a hologram display system and a road haulage service.

In all, 45 graduates were selected for the first Graduate Enterprise Programme, funded by the Manpower Services Commission, they came from an initial field of 1,600 expressing interest in the scheme, all of whom had to be graduating in 1984 to qualify. All were invited to "start-up seminars" organized on a regional basis but half were discouraged by the blunt account they were given of their prospects. The seminars are designed to put off those who lack confidence in their project and determination to succeed, and they do.

The 800 who remained were then seen by local counsellors, who discussed each individual's business idea in detail and offered help in making formal applications for those still not disillusioned. In fact, only about 10 per cent of those who made initial inquiries applied, and even they were whittled down further according to their counsellor's recommendation before being invited to a two-day session of further evaluation.

In the end, 45 offers of places were made and such was the success of those who did embark on the course that the MSC has agreed to expand this year's intake to 70, involving Durham and Warwick universities as well as Cranfield. It puts the full level of support offered to the graduates at more than £6,000 over 18 months, including training, counselling, aftercare and cash grants. Each participant is given £1,200 to spend on market research, for example, and some will qualify for an extra £2,000 for an Enterprise Allowance.

The scheme offers assistance from the National Westminster Bank, British Petroleum, the British Institute of Management and the accountants Arthur Andersen, as well as from the business school itself. Three months of intensive work on the graduates' business plans prepares them for the launch, although some have actually formed their companies before beginning the course.

Only 25 of the 45 offered places on last year's course took part in the exhibition at BP's headquarters, but none has had a disaster as yet (although Cranfield staff admit that one is inevitable sooner or later.) One member of the course decided that he was not ready to go into business on his own after all, and others have scrapped their projects and started new ones as a result of advice received during the programme.

Those who did exhibit covered an extremely wide range of projects, the majority based on expertise acquired during undergraduate careers, others pinning their hopes on outside interests with no connection to their academic pursuits. Some are already on course for big profits.

Christine Wallis, for example, was a mature student at Bedford College of Higher Education, studying English, education and drama before embarking on a knitwear business which has won orders from prestigious firms such as Body Shop and Harrods, which commissioned her to design a sweater incorporating the store's trademark. She is about to employ her first full-time knitter and is expected by the Cranfield staff to make a big success of her venture.

Cranfield already ran entrepreneurship courses for mature students returning from a period at work to take an MBA, but the Graduate Enterprise Programme is one of the few initiatives aimed at those considering self-employment straight after higher education.

Business school staff see a need for much more training of this type, perhaps incorporated into existing undergraduate courses.

In the arts and particularly in craft subjects, a period of self-employment is often the only way to pursue a career in a closer field. Better structured advice at the right stage might produce many more success stories.

Enterprising reward: *(from left)* **Christine Wallis, who runs Woolpack designer knitwear, the Lord Mayor of London – Sir Allan Davis, Professor Paul Burns, head of Small Business Development Centre at Cranfield and Wendy South, who runs Wendy South Designs at the Graduate Enterprise Exhibition.**

Gem of an idea

The GEP (see story opposite) has enabled Maria Koutsou (above) to make direct use of the skills she learned at Sheffield Polytechnic studying silversmithing and jewellery design. She has returned home to Bolton to set up a fashion business, designing co-ordinating jewellery to sell with designers' collections of clothes. The MSC grant enabled her to carry out market research which confirmed that there was a gap in the market for her jewellery.

Grand designs

Mark Saunders (above) had been to two higher education institutions before he joined the GEP: Imperial College, London, for a degree in mechanical engineering and the Royal College of Art for a Masters in industrial design engineering. Now he is hoping to exploit inventions made possible by that training. His business will be based on a folding bicycle with belt drive and no chain, for commuters, but he has also won awards for a jar opened by rubber lining belt and a child-proof tablet container, which also monitors dosage.

Party line

Tessa Finch (above) was social organizer for the Oxford Union, making a £4,000 profit for the society from its first ball and later transforming its cellars into a profitable cocktail bar. She has now decided to use her talents to run an agency in London putting on parties and promotional events. Finch's, whose Pink Panther mascot enlivened the exhibition was commissioned by Arthur Andersen, one of GEP's sponsors, among a growing list of clients.

Dream started with a pinch

How UMIST achieved the ideal combination of independent financing and academic freedom. Report by Peter Aspden

No matter how hard they try, the relationship between universities and industry is bedevilled by mutual suspicion. There are sound – and poor – reasons for that fact, but the atmosphere will only change if a less dependent way of financing certain fields of research can be found; if academics discover a way of being funded by industrial concerns without, as Professor Bodo Linnhoff puts it, "selling their souls".

The Faustian metaphor comes easily to him, as if he has given the dilemma plenty of thought. Nearly 10 years ago, as a PhD student in Leeds, where he had come to study from his native Germany, he made a remarkable discovery in the field of thermodynamics which was to have substantial commercial implications. Academic acclaim was not slow to follow – Professor Linnhoff was awarded the Royal Society's gold medal in 1981 for his work on the "pinch principle", a technique which could slash the energy costs of big chemical companies.

But the harnessing of his discovery to the needs of industry was a more complicated process, which he has only now settled to his complete satisfaction. He and his team of researchers have set up a research consortium at the University of Manchester Institute of Science and Technology in conditions which would have been considered extraordinary when he started his academic career.

For an annual subscription, a number of companies join the "club", as he likes to consider the consortium, in return for which they receive up-to-date findings of the research team. The companies have no control over the content or direction of the research; Professor Linnhoff and his colleagues have a completely free hand in choosing new areas with potential, before giving the results to the member companies. Then, as normal, they are published for public consumption a couple of years later. Complete academic freedom and independent financing, a dream combination.

He believes the scheme is a unique venture in Britain. Even in America, only a few such arrangements are in operation, such are the delicacies and difficulties of the relationship between the academics and the industrialists. When he floated the idea, it took more than a year to investigate the legal implications of what he was suggesting and to draw up the unprecedented terms of the contract.

"I did get moral support from many people, but no one really understood what I was trying to do. In the legal field, the university was quite difficult to deal with, while the Science and Engineering Research Council jumped to the conclusion that there were strings attached to the deal. They didn't recognize the uniqueness of what was happening. Their attitude was one of benevolent disinterest, which is extraordinary."

The puzzlement of outsiders reflects the highly unusual nature of the UMIST initiative. To Professor Linnhoff himself, it represents an ideal comprise between the different demands of industry and academia, although, as he points out, they are actually working in the same direction for much of the time. He worked for ICI for five years after completing his doctoral thesis, a phase which he regards as crucial in the development of his work. "That was where the usefulness of the principle was first acknowledged. When I first formulated it, I myself did not really recognize what I was doing.

"It was difficult to see its importance until the industrial applications were examined. If I had not gone to ICI, the principle might still be confined to a doctoral thesis somewhere. I am sure it happens all the time." Fortunately, ICI, who also failed to realize the worth of the principle immediately, let Professor Linnhoff publish his work freely; wider circulation of his research led to discussions among other companies and scientists, and he gradually felt the urge to come back into academic life.

"I certainly felt I wanted more independence and freedom to pursue my own interests. I also felt what I was doing was a genuine scientific breakthrough, with a wider significance than had been explored up to that point." So, to UMIST, where he went back to some first principles and started looking at the "pinch principle" from scratch, to try and devise a whole new engineering design system.

"A new discovery is a step forward in its own right, as well as being a stepping-stone to other new discoveries," he says, noting that only an academic climate could give him the atmosphere to step out in new directions of his own choice. But the years at ICI had made him acutely aware of the importance – and the beneficial effects to his work – of technology transfer. Firms who began to use the principle to save money began to request courses to investigate ways of updating their techniques and making further advances. This led to the idea, mooted by an American friend, of setting up a "club", with a kitty which could be used for undertaking such work. Eventually, the consortium began to take shape.

The three basic tenets of the Linnhoff team's philosophy give an idea of the balance struck between money and scholarship. Targets Before Design emphasizes the need to predict achievable design targets; Technology for Profit stresses the financial advantages; No Black Boxes reflects UMIST's "endeavour to obtain scientific insights and understanding, not to produce black box computer programmes."

At present, each of the 18 member companies, which include BP, Union Carbide, Unilever and Procter and Gamble, pay £11,000 a year in subscription fees, which enables the 15-strong research team to carry out the work. Both the number of companies and the size of the team are strictly limited to ensure intimacy and quality control. The role of trust in the relationships with the companies is absolutely crucial.

"Obviously when you visit companies and discuss their requirements, you pick up a lot of confidential information and it is important for them to know that you won't let their competitors know," says Professor Linnhoff. For this reason, he does not want to include more than 20 companies in the consortium. "We don't want it to be just a source of funding, it's important to have a close dialogue."

Even companies which are not members benefit in the long term; because research findings are distributed immediately, the final quality of the published version is much higher, having already been field-tested. In the meantime, the favoured 20 can choose to leave the consortium any time they like – contracts are signed annually. Of course, £11,000 is a tiny sum for these industrial giants, but the commitment amounts to rather more than that – about five full-time managers, Professor Linnhoff estimates. Although he enjoys the freedom of the no-strings-attached deal, he emphasizes that the whole arrangement is dependent on his team's performance and its results – not unlike industry, in fact.

"If we don't perform, we could be closed down within 12 months, it's as simple as that." He somehow doesn't sound alarmed at the prospect. Interest in the "pinch principle" is increasing all the time, the future of the consortium looks safe for the time being, and the whole development is producing fascinating side effects. Such as the one which sees all the member companies getting together for an annual conference, and freely exchanging scientific data. All pulling in the same direction, with a university, remarkably, at the helm.

Ngaio Crequer profiles Dame Anne Warburton, former diplomat and college head

Britain's ambassador for womanhood

A graduate of American and British universities, former merchant banker, a career diplomat including posts with Nato, the UN and then the British ambassador to Denmark, and now head of a Cambridge college.

She **is of course Dame Anne Warburton and there could be no better example of a successful woman for the students of Lucy Cavendish College, the only college in Europe which caters only for mature women students.**

Significant, too, that she came to her main career, diplomacy, as a mature woman. Working in the intelligence department of Lazard Bros in London she had already decided she was not going to be a really good economist (not sufficiently good a mathematician), and work in the City did not appeal as a long-term proposition.

She was just turning 30 and a friend sent her a clipping on over-age entrance into the Foreign Service. She got in and went on to forge a glittering career, culminating in Britain's first woman ambassador, when she served in Denmark in 1976.

But Dame Anne still looks rather surprised if you ask her questions along the lines of "woman in man's world" . . .

"I have always wanted a real job to do, and I have wanted to do it as a person not as a woman."

Sometimes, she accepts, it has been an advantage to be a woman. "As a diplomat, to put it at its lowest, you can be recognized more easily in a room full of men."

She sees feminism simply as a question of fair play. Although she has never belonged to "crusading organizations on women" as she puts it, she has just become a part-time commissioner of the Equal Opportunities Commission.

"I think their approach is that the law is right but getting attitudes worked right through is more difficult. It is not always discrimination but an ingrained lack of self-confidence among women, inculcated by family, teachers and friends."

Dame Anne, appointed president of Lucy Cavendish College at the end of last year now takes up "my third career of my third age".

Her own education was not the traditional one it might look. At the age of 13, at the start of the war, she was evacuated to America, (her mother was American) and spent the next six years there.

She took a degree in Government and Economics at Barnard College, Columbia University, in America, when she was only 18.

In 1946, she stayed with friends at Oxford and fell in love with the place. She went to a crammers' to study English, history and classics for the entrance exam. "No electricity; just candlelight and hot water bottles."

She studied PPE at Somerville, "teaches you how to read *The Times*". And then the next eight years had three different economic jobs.

First, in London, at the American Embassy on the Marshall Plan, then with the Nato secretariat, in Paris, following the economic development of some of the member countries, then to Lazard Bros.

Then, in 1957, she entered the Diplomatic Service and worked in London, Bonn, Geneva and New York.

Between 1976–83 she was British ambassador to Denmark, "a dream of a post. It is a very small and friendly country. They like the British. You can talk directly to them. They were accustomed to looking to us for culture, defence, etc. . . Doors were always wide open."

Dame Anne Warburton: "question of fair play".

She quickly learned Danish, which endeared her to them, and she was kept at her post for seven years, "an unheard of time for that kind of posting".

She went on to become ambassador and UK Permanent Representative, to the UN, in Geneva, and she retired 18 months early, to become President of Lucy Cavendish.

Now she wants to bring the college into the limelight and she is working hard on plans for an appeal to finance an extension which will provide more study facilities and accommodation for the students.

"We reach the parts that other colleges cannot reach," she says. She believes passionately that the skill, ability and intelligence of women is one of Britain's most neglected resources.

She wants to open up the range of studies pursued by girls and women, rather than keep to "traditional" subjects in the arts, biology, medicine or veterinary studies.

She wants to make it easier for women to return to higher education and employment after they have raised their children. Many women returners have lost their confidence to compete intellectually and need special help.

At Lucy Cavendish a Fellow of the college serves as director of studies to advise on the programme of studies and arrange teaching as required. It is a small, supportive community, there is no High Table and common rooms are shared by staff and students alike. Students are often older than the teachers.

Students come from backgrounds as housewives, secretaries, nurses, bank cashiers, single or married, with or without children (though there is no accoommodation for children yet).

The college has its own entrance test designed to discover not factual knowledge but potential for study. There is a three hours general paper and another more subject-directed. Then there are interviews to probe subject motivation, and whether the student can take the strain, how determined they are, what their family and financial situation is.

Some 64 people were interviewed this year and 24 places were offered, some with conditions that A levels or similar requirements were necessary.

In the last five years only one student has failed to finish her course and the college is near the Cambridge average for numbers of students in the first and 2:1 grade. That academic achievement has increased dramatically in the last few years, along with a tendency for students to be slightly younger, around 30 years of age.

"The results we get put paid to any suggestion that we are second class because we came up last," Dame Anne said.

"The college grew up in the kind of do-it-yourself image and people thought you did not have time to be academic. But we have proved our worth. Second chance is not second rate."

Questions of faith in the light of experience

The voluntary college – a curious half-way house between seminary and l.e.a. further education – is threatened with extinction. Adrian Thatcher makes a plea for its survival.

It is a well-known fact that, as soon as Adam and Eve had been booted out of the garden of Eden, Eve remarked to her husband, "Darling, we live in a period of rapid social change!" The changes which have recently affected the voluntary sector in higher education have come as suddenly and dramatically as the Fall itself. Yet what forbidden fruit have the colleges consumed? Is there really displeasure from on high with those very institutions which were bringing a Christian voice and a Christian presence to higher education?

The fall and fall of the voluntary colleges makes grim reading. In 1969 there were 51 voluntary colleges, just over half of them Church of England, and 107 colleges provided by l.e.a.s. Since 1969 there has been a virtual wipe-out of this sector of higher education. In 16 years, 16 Church of England colleges have disappeared, some by merger, more by closure. In some cases stronger combined institutions have emerged. But with fewer than a dozen Anglican colleges left and a Secretary of State baying loudly for the speedy spillage of yet more college blood, the question of the distinctiveness of the survivors can be shelved no longer.

There are two broad views about the remaining voluntary colleges in higher education. One assessment, often assumed if less often articulated, is that since Christian faith and Christian institutions have become more marginal to more people since the colleges were set up (and about that there can be little doubt), the colleges themselves have become an anachronism. Their time has come: it has also gone. If mergers or amalgamations with bigger secular institutions are possible (even if they amount to disappearance without trace) then they are likely to be thought prudent and encouraged – the involuntary euthanasia of the voluntary colleges.

The other view, of which I am a partisan supporter, is that whatever institutional rearrangements may be thought desirable in higher education, the church colleges will survive and will deserve to survive only if they remain distinctive within it. So far, so good. The trickier question is, What form should this distinctiveness take?

The predicament of the church colleges is illuminated by a "disquieting suggestion" propounded by the philosopher, Alasdair MacIntyre, in his *After Virtue*. (Duckworth, 1981) We are invited to imagine a time when the sciences fall into disrepute, perhaps after a succession of disasters like that on Three Mile Island in 1979. Scientists are lynched, laboratories burnt down, and finally a Know-Nothing party takes power. Books are burnt, equipment smashed, scientific inquiry becomes a crime. Finally the Know-Nothing party is removed from power, and science can resume. The problem is, no one any longer knows how.

> "... all that they possess are fragments: a knowledge of experiments detached from any knowledge of the theoretical context which gave them significance; parts of theories unrelated ... to the other bits and pieces of theory which they possess ...; instruments whose use has been forgotten, half-chapters from books, single pages from articles, not always fully legible because torn and charred."

The conclusion we are invited to draw is not about science but about *morality*. It is "that in the actual world which we inhabit the language of morality is in the same state of grave disorder as the language of natural science in the imaginary world which I described". I think this comparison is far-sighted and far-reaching. I add to it only that the language of religion is also in a state of grave disorder. A tradition which brought forth the voluntary colleges and which even now they represent, is bequeathed to us and we don't know how to avail ourselves of it. Like the would-be scientists trying to re-establish their disciplines, we may not even know what it is that we have lost.

The voluntary colleges are a remnant in the modern system of secular higher education, and as a remnant they can make a contribution to it out of all proportion to their size. The more established ones pre-date all our polytechnics and most of the universities. They have a proud record. They are undoubtedly odd institutions. They are not seminaries, training men and women for priesthood: but they are not straight secular places either, serving the purposes of the state and no other. This is why they are sometimes referred to as "half-way houses", "bridges" between two realms, or "meeting places", not, that is, places where the secular world can be lectured about its godlessness, but where Christian values are "seen as a communal resource to be shared and debated alongside other values". (*The Future of the Anglican Colleges*, Interim Paper 3, Culham College Institute, Abingdon, 1985, p32).

The colleges grew up out of an attempt to bring Christian faith to bear on a particular social need, and as a result to engage in social action. They are well suited to make connections between that religious tradition which produced them and the equally harsh social and intellectual realities of today. The problem is: given the vastly different religious and intellectual climate nearly 150 years on, how can this distinctiveness be expressed?

Let's first say what *isn't* meant by distinctiveness. The "neopuritan option" would make the colleges distinctive. And it would empty them at the same time. Compulsory chapel might be re-introduced; halls resegregated; debates could replace discos; the religious thought police could patrol sociology lectures. Vicars could use their vetoes at internal validation. And "Forward into the Past" might be the new logo of the VSCC. Values might be imposed, world-views enforced, mores monitored and academic freedoms compromised, but hardly *ad majorem dei gloriam*.

These misconceptions, doubtless exaggerated, arise because the colleges have few signposts to follow into the future and some bad memories of the past. But if a past generation of church colleges was in some respects too self-consciously religious, the opposite and greater danger is that another generation will be self-consciously non-religious, pretending to conceal its awkwardness in the face of God's absence.

Other voices concede the need for distinctiveness while wishing to express it in ways that turn out not to be distinctive at all. What might be called the clerical argument, the care argument and the community argument are all heard at the present time, and none of them is valid. According to the clerical argument, chapel and chaplain make a vital contribution to college life and so renders it distinctive. This may be true, but chapels and chaplains play an important part in non-church colleges too, where the absence of any institutional attempt to provide a religious ethos aids them in providing a flourishing yet independent ministry and presence. So as a comparative argument the clerical argument gets us nowhere.

The care argument has two standard forms. Church colleges care more for their students; and, provide smaller and thus more effective, educational environments. Neither form can establish the distinctiveness of a church college. The colleges make creditable provision for the pastoral care of their students: so do the l.e.a. colleges and the polytechnics, which can provide teams of trained and professional counsellors. In any case, student unions are increasingly providers of the personal services their members want. What of the small-scale atmosphere of some (though not all) of the church colleges? At least, so the arguments runs, small is caring, even if it is no longer beautiful.

Undoubtedly, some applicants choose the colleges because of their size. Smallness though is not a quality monopolized by the voluntary sector. Even if it was, it remains doubtful whether this version of the caring argument establishes anything. Some people believe that large comprehensive schools are uncaring institutions on account of their size. They believe in an inverse law between the size of an institution and the quality of the relationships within it. But this belief entirely overlooks the elaborate provision comprehensive schools make for pastoral care, and are well able to make, just because of their size. Doubtless there are caring and uncaring environments at all levels of education, but the relation of these to their size is much more complicated than the small is caring premiss allows.

The community argument is a little more convincing but falls short of the distinctiveness the voluntary sector must re-establish. If the sector has helped to establish community involvement, community access and community service in higher education, then that is much to its credit. But again maintained institutions can now make equal claims to operate similar policies.

In short, all three arguments confuse a necessary condition with a sufficient one. It is necessary that voluntary colleges maintain a formal religious ethos, care for their students, provide effective and pleasant learning environments and develop a range of links with their local neighbourhoods. Their achievements in all these areas should not be underestimated, but taken cumulatively they are not sufficient to establish the distinctiveness of the sector.

They do not answer the question "what do voluntary colleges provide that the state sector does not?" They may provide a sufficient reason for a student choosing a church college, but they do not sufficiently tell us in what respects if any a church college differs from its more secular counterpart.

Fortunately there *is* a clear answer to the distinctiveness question. A church college should be distinctive by its curriculum. There will be components in it which would not be expected in an l.e.a. college or wholly secular place of learning. This is because what is at issue in the identity crisis of the colleges is a cognitive matter. The Christian faith makes genuine knowledge claims about what there is to be known and what responses are appropriate to that knowledge. These claims are certain to be contentious in the present day, but that provides an additional reason for articulating them as clearly and publicly as possible, and not (as so often happens) maintaining a silence about them in case they provoke a mild incredulity from the surrounding secular milieu.

In MacIntyre's imaginary world the philosophers carry on their business as usual. The analysts analyse while the phenomenologists conduct their value-free inquiries. In each case the methods they use give them not an inkling of the hiatus the Know-Nothing party has created. But those who contend that church colleges should just be secular look-alikes are remarkably like the imaginary philosophers who are unaware of a past rich heritage. Yet the church colleges, a small remnant in higher education, are uniquely placed to make connections with their own heritage, one which has disappeared much too quickly.

The Church Colleges Research Project (confined to Anglican colleges) has shown that 73 per cent of staff have some sort of Christian affiliation. (Interim Paper no 6, p3) No problem here, then, with a distinctive curriculum. Presumably the other 27 per cent won't object to the suggestion of an atheist colleague of mine that "perhaps the influence of the Christian foundation should be to encourage the creation of an environment in which the various claims of the Christian faith can be critically examined, and their influence on a variety of academic disciplines and secular movements considered". This seems a fine approach to distinctiveness and one around which all members of the colleges should be able to unite regardless of religious differences.

But how might it be put into e... Part of the learning experience ... students will include, as a mini... curriculum design, some acquain... with relevant parts of the Chri... tradition. Courses will make conn... links between that tradition a... brought the colleges into existence ... the very different circumstances ... which we now find ourselves. Th... should be quickly added, will not ... to be received in silence, or to ... uncritically, or imposed from ab... Indeed this very tradition is for... ambiguous and has to be continually ... all its ambiguity. But connections ... be made all the same.

But what connections? In te... teacher training provision we are r... quired to take on many new cha... Increasingly students on the BEd ... grees have to be equipped to cope w... the new pluralism, the multicultu... society, bankrupt managerialism, ... social identity crisis, a profound u... tainty about moral and spir... values, and so on. The Chri... tradition has its contribution to m... both to the diagnosis of these problem... and to their resolution. Not less ... offers a point of view that is not tied ... any political party, pressure group or programme. Critical, value-laden analysis has always been part of the Judaeo-Christian tradition. It began with the biblical prophets who cried out for justice for the poor in the face of harsh economic policies imposed by Israelite kings. The Archbishop of Canterbury's recent report *Faith in the City* shows that that critical value-laden tradition is reassuringly alive.

The connections which will be made with largely depend on what courses are currently available in the colleges and what tutors, academic boards and validators decide. My place of work runs an innovative degree in recreation and community. Yet when the sociologists and the leisure and tourist experts have done their work it still remains to be pointed out that "recreation" is a theme of both biblical testaments, that it has a *religious* basis which a church college might be expected to commend. (In the old creation myth even God needed to rest – making a world was a tiring business!) As for "community" (that overworked word), Christians take their understanding of that from the church where in Christ "There is *neither Jew nor* Greek, slave nor free, male nor female". (*Galatians 3.28*) That is in a more modern idiom), there is no discrimination against anyone on grounds of race, class or gender.

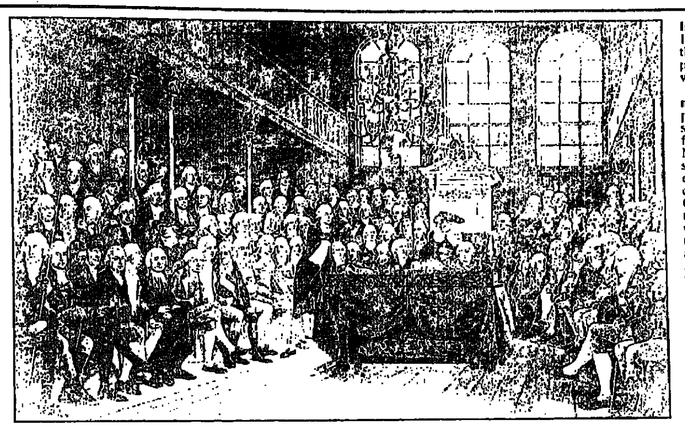
Similar connections can be made in a humanities degree. Most of the church colleges have one of these, or an equivalent. The Christian tradition has its own account of humanness and its own exemplification of what perfect humanness might be. There may, however, be a difficulty with this proposal for curricular distinctiveness – the very people who would run it (the academic staff) appear not to want it! The research project already cited reports that few staff "consider that Christianity should be an important element in influencing the curriculum". The suggestion that Christian insights should appear on the curriculum ranked low in a list of objectives which were put to staff.

This finding can be explained in a number of ways. Any unqualified mention of a religious distinctiveness is bound to evoke suspicions of interference with academic freedom, the surrender of subject autonomy, grudging deference to religious studies departments, and so on. In the absence of any detail about how the Christian tradition might influence the curriculum, reservation about the suggestion is justified. A survey designed merely to test current attitudes towards pre-defined options, rather like the work of MacIntyre's imaginary phenomenologists, cannot be expected to arrive at the deeper considerations which are crucial to the analysis.

What is needed instead is for each college to produce a series of models of distinctiveness, in which staff are involved at every stage. It should then be possible to arrive at a verdict, one way or the other.

Only a distinctive curriculum makes the church colleges genuinely distinctive. In practice, however, it will be combined with other qualities such as those of size, quality, care, community-orientation and the innovation which gives the whole sector a proud record. But in the final analysis church colleges are *religious*. This is their *raison d'etre*, and their great opportunity.

Adrian Thatcher is head of religious studies and philosophy at the College of St Mark & St John, Plymouth.



Trials and visitations

by Graham Townend

The Jarratt report on efficiency in the universities and the Green Paper *The Development of Higher Education into the 1990s*, have left no doubt about the determination of Margaret Thatcher's administration to challenge the consensus of the past two decades. With its large parliamentary majority, the Government has ignored the protests of the country's educators. Surprisingly, however, it was in the House of Commons where the administration encountered its most dangerous opponents.

As yet it is unclear if this disquiet could force the Prime Minister to reconsider but there are interesting parallels with similar developments in the early 18th century. During the reign of King George I a radical Whig ministry, with an overwhelming superiority in Parliament, was unable to reform the universities of Oxford and Cambridge because of the hostility of a group of prominent Whigs.

The accession of George I in August 1714 presented the Whig party with an excellent opportunity to establish its political ascendancy and to proscribe its Tory opponents. Encouraged by an electoral victory which gave them a majority of nearly 130 in the House of Commons, they carried out this strategy with ruthless efficiency between 1714 and 1716. After ostracizing their adversaries, the government turned its attention to those institutions which played an important part in maintaining and disseminating Tory ideals. Many Whigs regarded the universities of Oxford and Cambridge as centres of disaffection and welcomed any steps "to curb the insolence of these two seditious seminaries".

As if to emphasize the point, there were serious disturbances at both universities in May 1715 and the Secretary of State for the Northern Department, Charles, Viscount Townshend, "sent *rattling letters*" to Oxford rebuking the university authorities for failing to suppress this disorder. There were also growing demands for action from within the universities by those sympathetic to the administration, and a majority of the bishops, including William Wake, Archbishop of Canterbury, advocated ministerial intervention at Oxford and Cambridge.

Discussions involving Townshend and Humphrey Prideaux, Dean of Norwich, took place in November 1715 in order to formulate a plan of action. Prideaux was convinced that an Act of Parliament, granting the King significant visitorial powers over the two universities, was the only way to proceed. At Townshend's request he drew up detailed recommendations for improving the discipline and the standard of learning at Oxford and Cambridge.

Though the outbreak of a Jacobite rebellion in the second half of 1715 diverted attention elsewhere, it also served to reinforce Whig resolve to humble the universities. In the spring of 1716 Lord Chancellor Cowper, Lord Chief Justice Parker, and the Archbishop of Canterbury drew up a draft reform bill. It stipulated that the nomination and appointment of university officials was to be vested in the Crown or in a Commission established *by the King*. Any university or college officer who refused to acknowledge *persons* installed under the terms of *this Act*, and who was subsequently found guilty in a court of law, was to be suspended, fined, or imprisoned. The Chancellor of Oxford University could be removed at the monarch's pleasure and all the statutes at both universities, which were contrary to the act, were abrogated. Before the details of this scheme could be finalized, the unrest which had been building up in the Whig party over the previous two years finally came to a head.

It was inevitable that there would be some disappointments at the distribution of places and power that accompanied the Hanoverian Succession. The most disgruntled Whig politician was Charles Spencer, third Earl of Sunderland. Self-confident and ambitious by nature, Sunderland was outraged by Townshend's appointment as Northern Secretary, the post he himself coveted, and by his being forced to accept the Lord Lieutenancy of Ireland as compensation.

Sunderland was also on steadily worsening terms with the powerful Scottish magnate, the Duke of Argyll, who appeared as another obstacle to his political ambitions. After consolidating his strength, Sunderland struck at his rivals in 1716. His intrigues with the King and the Secretary of State for the South, James Stanhope, led to Argyll's dismissal and Townshend's relegation to Sunderland's former office of Lord Lieutenant of Ireland.

Once established as Prime Minister, Sunderland sought to heal the divisions in the Whig party which stemmed from his personal triumph and the disagreement over the conduct of foreign policy. He believed that legislation to reform the universities and to repeal the Occasional Conformity and Schism Acts would provide a perfect remedy. Unfortunately, at the same time a group of Whigs had begun to question the wisdom of the government's policies.

The reasons for the growing tension in the Whig hierarchy were personal and political. Townshend and his brother-in-law Robert Walpole, who was Chancellor of the Exchequer and First Lord of the Treasury, obviously disliked Sunderland's leadership because he had obtained the premiership at their expense. Yet it is also clear that many Whigs, including Townshend and Walpole, had begun to have serious doubts concerning the assumptions upon which government policy was based.

In response, they had started to formulate a more pragmatic political outlook in contrast to what they felt was growing ministerial recklessness. There were differences on a number of issues including religion and foreign affairs, and men who had formerly advocated university reform now adopted a strategy of non-interference at Oxford and Cambridge. Their views came to the fore in March 1717. Sunderland and Stanhope had wanted to mention a Royal Visitation of the universities in the King's speech to Parliament, but this suggestion was rejected by Wake, Cowper, Orford and other Whigs.

Almost simultaneously, the Duke of Devonshire announced "that he would as soon consent to a bill for divesting him of Chatsworth, as for depriving the universities of their privileges". Archbishop Wake was the odd man out in this group since he favoured reforming the universities, but he was not prepared to support it if the ministry went ahead with the repeal of the Occasional Conformity and Schism Acts as well.

Because of his opposition Wake was subjected to frequent visits "by our great men severally and diversely, touching methods for reformation of the universities by executing a trust in the King or his Commissioners". Lord Cowper, meanwhile, was trying to persuade Sunderland and Stanhope to reconsider introducing the University Bill into Parliament. The Lord Chancellor had dinner with them on March 13, 1717 where he gave his opinion that it was unwise to proceed with university reform at the same time as the bill to repeal the Occasional Conformity and Schism Acts. Cowper told Wake that "upon this they took a sudden turn and became resolved to have this of repeal first, and postpone that concerning the universities, which, your Grace knows, how lately and how much the King, as they said, had set his heart upon". Cowper probably exaggerated his influence, or had been duped, for it is clear that Sunderland still intended to go ahead with the University Bill and he was doubtless encouraged by recent developments in the House of Lords.

The birthday of the Prince of Wales, in October 1716, had been the excuse for serious disorder at Oxford involving townsmen and the troops that had been garrisoned there during the 1715 rebellion. A number of complaints were made against the soldiers and, despite the fact that the Privy Council had decided in their favour, the House of Lords accepted a Tory appeal to debate the cause on April 3, 1717.

In their eagerness to vindicate the university, the mayor, and the magistrates of Oxford, the Archbishop of York and the Bishops of Rochester, Chester and Bristol made a serious blunder by concentrating on refuting the allegation that the celebrations to mark the Prince's birthday were inadequate, rather than focusing on the actual disturbances.

This allowed the government speakers, including Sunderland, Townshend, Parker and Cowper to condemn the lack of festivities. The House then passed two resolutions vindicating the soldiers and criticizing the university. Sunderland wanted to exploit Whig hostility towards Oxford, but before he could whip up this sentiment the unity of the party had finally shattered.

By March 1717 Townshend and Walpole were openly expressing their dissatisfaction. Townshend had attacked the administration in the House of Lords and retribution quickly followed with his dismissal on April 9, 1717. In response Walpole, Devonshire, Orford, Pulteney, Methuen and their followers went into opposition. Cowper, however, remained in office as Lord Chancellor, but he became increasingly isolated and disillusioned and was to resign himself at the beginning of 1718. The government was now threatened by a group of dissident Whigs as well as their more conventional Tory opponents and if these two factions could create an effective coalition they could seriously embarrass and perhaps even bring down the Sunderland administration.

Sunderland was well aware of this danger and he hoped that an appeal to basic Whig attitudes, in the form of the University Bill, might draw off enough opposition Whigs to weaken his enemies and to undermine any projected combination with the Tories. He informed Cowper, in May 1717, that as there was "a Committe of the Lords to meet tonight at the Cockpit, I hope we shall have the honour of seeing your Lordship there, and I beg you would bring with you the University Bill, the King having spoke to me again about it".

The very next day, however, Walpole, and his supporters in the House of Commons, allied with the Tories to carry a vote that Dr. Andrew Snape, a leading High Tory, should preach to the House at the end of the month. This setback convinced the Prime Minister that the University Bill was likely to suffer a similar fate at the hands of his enemies.

Because of its political vulnerability the government could not risk introducing any contentious legislation into Parliament. The prospects for the introduction of the University Bill only began to improve in the spring and summer of 1718. A major cabinet reshuffle in March 1718, combined with a successful end to the parliamentary session in the House of Commons and a British naval victory in the Mediterranean in August seemed to have tilted the balance in the Prime Minister's favour. When Parliament met in November 1718 the address of thanks for the King's speech was carried by comfortable majorities in both Houses.

This was all the encouragement Sunderland needed to embark upon an extremely audacious programme of reform. It included the repeal of the Occasional Conformity and Schism Acts, the Peerage Bill, and the revocation of the Septennial Act. Sunderland also intended to include the University Bill in his package of reforms, a decision precipitated by the renewal of unrest at Trinity College, Cambridge.

There had been considerable dissonance at Trinity College in the closing years of Queen Anne's reign, and, despite attempts to put a stop to the continual squabbling, things did not improve with the accession of George I. Dr Richard Bentley, the Master of the College, was a bluff and irascible Yorkshireman whose authoritarian manner was bitterly resented by his academic colleagues. After a royal visit to Cambridge in 1717, Bentley, as Regius Professor of Divinity, was expected to create a number of doctors of divinity, for which he demanded the payment of a fee.

Conyers Middleton, one of the doctoral candidates, disliked this arrangement and he decided to sue Bentley for debt in the vice-chancellor's court. As a result of this action the vice chancellor, Dr Thomas Gooch, deprived Bentley of all his degrees on October 17, 1718. Bentley at once petitioned the King, as supreme visitor, complaining that he had been suspended without either a summons or a hearing.

Ostensibly the Bentley affair was a minor academic dispute but contemporaries were well aware of its political significance. Dr Gooch appeared before a Committee of the Council on November 6, 1718 where, in the presence of George I, he was cross-examined by Sunderland, Lord Chancellor Parker, and the Archbishop of Canterbury. Bentley and Gooch were then ordered to put their arguments in writing for the further consideration of the Committee. During November and early December it examined the Acts of Parliament pertaining to the various charters and grants made to Oxford and Cambridge, together with the powers relating to the right of visitation.

The report, issued on December 10, 1718, declared that the King had an undoubted right to appoint a Royal Commission to undertake a visitation of the two universities. Immediate action was expected. Edward Harley, junior, remarked that "a visitation of both universities is very warmly talked of". Robert Walpole, in a speech in the House of Commons attacking the repeal of the Occasional Conformity and Schism Acts, announced, in January 1719, "that there was a design of visiting the universities".

Nothing was attempted in the course of the 1718–1719 sitting because the administration was preoccupied with the repeal of the Occasional Conformity and Schism Acts and promoting the Peerage Bill. Though Sunderland had to make some concessions in the House of Lords, he managed to persuade Parliament to accept the repeal bill, but, owing to mounting hostility in the House of Commons, he was forced to drop the Peerage Bill in April 1719. Sunderland was intent on renewing the struggle at the next meeting of Parliament. As part of the preparations a Committee of the Council met at St James's where a further committee was established "to consider of a form of a commission for visiting the University of Cambridge, as well as in this particular care of Dr Bentley, as in such others as shall be thought proper".

Sunderland, meanwhile, was busy rooting out opposition to his government among King George's Hanoverian ministers. By October 1719 he was informing his associates that "the King is more determined than ever to persist with vigour in the measures you and your friends wish. He is resolved to push the Peerage Bill, the University Bill, and the repeal of the Septennial Bill. If this won't unite the Whigs nothing will".

Unfortunately, Sunderland's plan, rather than binding the Whigs together, had the opposite effect; it reinforced the divisions. It was this which was to prove the undoing of the Prime Minister's design. The Peerage Bill was introduced into the House of Lords in November 1719 and it had been approved by the end of the month. In the House of Commons, however, it was a radically different story. When the bill was given its second reading there was a debate which lasted for almost eight hours; it was Robert Walpole who made the decisive contribution against this measure. A ministerial attempt to have the bill committed was rejected by 269 votes to 177 and the bill was then thrown out without a division.

Sunderland knew that he would have to abandon both the University Bill and the repeal of the Septennial Act as a result of this defeat and he made no further attempt to reform the universities. Sunderland died in April 1722 and Walpole replaced him as Prime Minister. The government now adopted a policy of compromise and conciliation towards Oxford and Cambridge.

In 1723, Walpole's ecclesiastical adviser, Edmund Gibson, Bishop of London, launched a scheme under which 12 dons from both universities were to take up duties in the Royal Chapel for a month each. The following year Townshend and Gibson founded the Regius Professorships of Modern History and Languages at Oxford and Cambridge. Clearly the ministry was trying to convince the universities of their goodwill, and though this policy was only partially successful it was a marked contrast to the vigorous reformism of the Sunderland administration.

The author is teaching part-time in the University of Edinburgh department of history.

Richard Cobb

Specialism, self-indulgence and call of the valleys

The letters came back with depressing regularity and predictability. I was, they all pointed out, "lacking in teaching experience", my field of research, though "interesting and original", was "too narrowly specialized". Sometimes they would go on to point out that I appeared to have little knowledge of English history and that this constituted a "grave gap".

In a letter from Lord Lindsay, I was told that my interests were too local "for the wide scope provided by the syllabus of the University of Keele". Generally I did not even need to read on to the end of these politely worded expressions of regret to get the general drift.

I could of course have pointed out – not that it would have done any good – that I *did* have *some* teaching experience, though only in that of teaching English to Poles and Czechs, and, later, in a variety of French institutions: the *lycées* Saint-Louis, Michelet, and Hoche (as for an 18th-century *parlementaire*, I was driven out of the centre of Paris to banishment *sur le pourtour*, though never as far as Pontoise or Provins): *Air France* (*hôtesses de l'air*, a most agreeable assignment), the *Ecole Nationale de la Marine Marchande* (wireless-operators), the *Ecole Nationale Agronomique* (as a purely notional *lecteur d'anglais*, for I had no pupils and merely drew my monthly pay packet from the rue Claude-Bernard), the *Centre National des Télécommunications*, the *Ecole des Francs-Bourgeois* (run by the literally heavy-handed *frères de l'école chrétienne*), the *Cours Pigier* (for aspiring typists and stenographers), and, bringing up a banal rear, as if in imitation of a Queneau novel set modestly in Rueil-Malmaison and the *bois de Sainte-Cucufa*, the *Pension Bigot* in Enghien-les-Bains, a cramming establishment for those who had failed the June sitting of the *bac* and who, under my firm guidance, sweated it out under the glass roof of the *pensionnat* during the months of July and August. The *Pension* provided in fact my only source of income during the difficult period of the long summer break.

Nor was *that* quite all. In the army, apart from Poles and Czechs, I had been provided with a remarkably varied group of military illiterates: shepherds from Snowdonia, Cypriots and Egyptians, and a surprising number of genuine Cockneys who had managed to go right through the London school system till the age of 14 or 15 without ever acquiring the first rudiments of reading and writing.

It was better not to refer to the two teaching appointments that I had accepted and that, at the last moment, I had *not* taken up: that of French Master at Uppingham in 1940 (a job that I had found a bit off-putting when told by the senior French master that he hunted regularly to hounds, and by the headmaster, Mr Wolfenden, that I would also have to teach something called current affairs), he said he was very keen on current affairs), and an assistantship in French at the University of Glasgow in 1948.

I had, too, been fairly unlucky in my timing: 1917 had been a bad year to have been born in. I had got a Second in June 1938, and then had about 14 months' research in the *Archives Nationales* in Paris on a thesis devoted to the (brief and bloody) life of the *Hébertiste* leader, François-Nicolas Vincent, secretary-general of the Ministry of War in 1793–1794, and guillotined in the spring of the latter year.

As a bachelor, with no job to return to, I was right at the back of the queue for demobilization, and, had it not been for the providential atom bomb, I would almost certainly have found myself posted to the Far East, facing an intact Japanese Home Army of three million men, after the end of the war in Europe. In October 1946, when I left the army, all I could show for myself was the title of MA (Oxon).

I made what I could of this behind my name in a series of contributions to the *Tribune Libre* of *Le Monde* in the early 1950s, as *Maître-ès-Arts de l'Université d'Oxford*. It did sound a good deal more impressive than in the original; and the *ès* was my own rather happy inspiration. But there was nothing much I could do with "One-time Postmaster of Merton College".

It is true that I was indeed an 18th-century historian, or at least fancied myself as such. But I could not see what the French would have made of my description of myself as a *maître-de-poste*, a job that had gone under with the disappearance of the mail-coaches. British academic titles do not translate easily.

It stands to reason that it is hard to acquire experience of university teaching if one is never given the opportunity to teach in a university. For several years – 10 or so – I reflected rather bitterly on the unfairness of such a situation, as polite letter of regret after polite letter of regret reached me at No. 12, rue de Tournon (Vime).

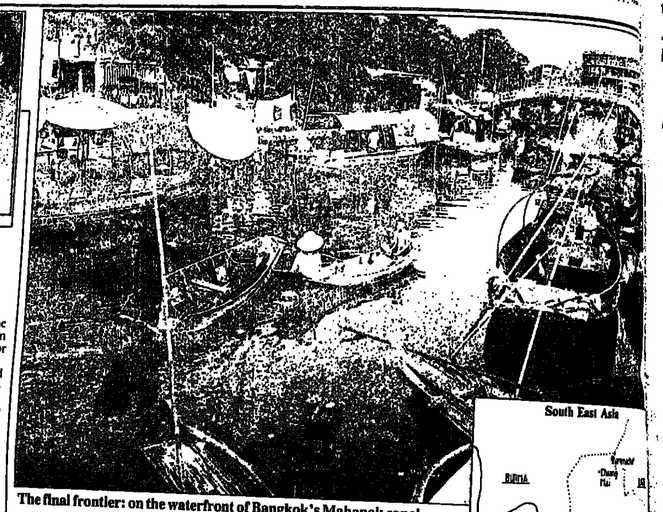
An article on the bargees of the Seine and Oise Valleys indicated my irredeemable specialization. The longer my list of publications, the more remote became my chances of employment. Of course I did not worry too much, because I was quite idyllically happy in Paris. Georges Lefebvre, my *directeur de recherches*, urged me to switch to research in *English* history. But I was much too firmly set in my ways.

In the end, my combination of persistent research for its own sake and sheer self-indulgence in archival exploration paid off, though not as a result of my active efforts on my own part. My benefactors, though I did not know it at the time, were Albert Goodwin and the late John Bromley. The former had heard me read a paper – my first to that delightful Sunday morning gathering – to the *Société d'Histoire Moderne*.

He had spoken to Mr Bromley on his return to Oxford, and I had been invited to give a talk to the Oxford Eighteenth Century Group at Christ Church. My talk, in a bizarre franco-English, had been concerned with deChristianization and the related subject of the destruction of dogs during the Terror.

The dog bit turned up a little later in one of the novels of my New Zealand friend, Dan Davin, who had been at the talk. Soon I acquired some more equally powerful backers: Christopher Hill, Goronwy Rees, and, most important, the French Revolution historian, Alun Davies. In the spring of 1955, the latter, whom I had first met in the archives in 1939 (he had remained there, blissfully unaware of anything happening outside the Palais Soubise, Dinard just ahead of the Germans, and returning to Wales on a collier) sent me a tourist guide to the principality.

I was puzzled at the time by his presents. But in the summer I was called for an interview at Aberystwyth and was offered a full lectureship in modern history. I was then 38, had no previous experience of university teaching, had almost lost the use of spoken English, and had written nothing in that language (unless my described) for well over 10 years. It was a back-to-front sort of situation, imposed on my unwilling self. My unplanned career thus all at once lurched forward into a totally new direction under the benign and utterly charming protection of Goronwy Rees, then principal of U.C.W. (but not for long).



The final frontier: on the waterfront of Bangkok's Mahanak canal

Made in Bangkok

David Hind on the mixture of East and West that makes Thailand an object lesson in interdisciplinary studies

At 10.55am last December 15 a party of 10 students and three lecturers from Newcastle upon Tyne Polytechnic boarded a Royal Jordanian Airline's Lockheed Tristar bound for Bangkok, Thailand. The purpose of the journey was to spend 16 days travelling around Thailand on an educational field visit, relating the subjects that the students study (business subjects and geography) to the third world. In total, we covered 1,200 miles travelling by train, bus, jeep, taxi and tri-shaw. Our field trip started in Bangkok before visiting Chiang Mai, Thailand's second largest city, from where we journeyed to the northern most part of Thailand – the Golden Triangle. The final days of our trip were spent in the coastal region of the Gulf of Thailand.

Thailand was chosen as the destination for the field trip for a number of reasons. The kingdom is at the crossroads between east and west, being the final frontier of capitalism before entering the vast communist bloc that is made up of Burma, Laos, Kampuchea, Vietnam and China. Thus, Thailand offers the opportunity to observe the great political and social contrasts that exist in south-east Asia.

To enhance our experience of the country we travelled and lived as the Thais do, which allowed us to gain a greater appreciation and sympathy of people less fortunate than ourselves. No matter the discipline of academic, Thailand has something to offer whether it be issues of international business strategy or rural development problems in the third world.

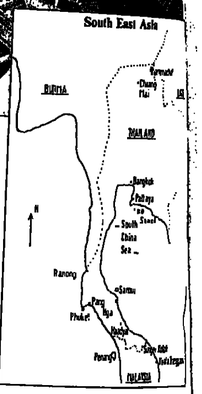
Six million Thais, 11 per cent of the population, live in Bangkok. This figure is increasing as migrants enter the metropolis from the rural areas looking for employment. Some guide-books describe Bangkok as the "Venice of the East" – to the west of the city a million people live in huts built on stilts over the klongs (canals). Many of these dwellers have been forced to live over the waterways due to the land shortages and overcrowding in the central built-up area of Bangkok.

Indeed, Chinatown, the area surrounding Yaowrat Road, has a highly intensive land use pattern that is becoming increasingly congested. Market places selling tropical fruits, vegetables, fish and meat cram the alleyways between old tenement blocks, the ground floors of which are used as workshops or food stalls with living accommodation to be found above. Young Thai men draining blood from recently killed chickens compete for valuable space with coffin-makers next door to Chinese pharmacists selling traditional potions and herbs to cure every conceivable ailment. All of these activities combine to produce a cauldron of unforgettable noises and stomach churning smells that are the trademarks of Bangkok.

Areas of Bangkok such as Chinatown provide enormous potential for the human geographer who wishes to investigate the social geography of the city. The business studies student is equally rewarded by observing how large multinationals such as Coca-Cola and Guinness have to adapt their marketing strategies to take account of the divergent culture of Thailand. The familiar Coca-Cola logo is still used but the graphics and messsage have been redesigned to cater for the different tastes of the Thai people. A study of the legal aspects of conducting business in Thailand uncovers the bureaucracy and red-tape that foreign businessmen encounter when they wish to operate in this part of the world.

A field trip to Thailand, though, would not be complete without investigating the rural way of life that 80 per cent of the population follow. To sample the peasant farming economy our party travelled right to the northern most point of Thailand, to the Golden Triangle, where the borders of Thailand, Burma and Laos meet. In this part of the country the pattern of life has changed little through the ages. Lumbering water buffalo still drag their primitive wooden ploughs through the deeply flooded paddy fields. The villagers live a subsistence life spending the afternoons hunting, shooting or fishing, trying to catch vital protein for their rice-based diet. The extended family is still much in evidence; the boys work the land and the girls, if the family is poor, are sent to work in the bars and nightclubs of Bangkok and Pattaya.

In the hills of northern Thailand live primitive migrants from Laos and Burma – the hill tribespeople. These tribes, such as the Akha, farm the upper hill slopes growing dry rice, maize and, previously, the notorious opium poppy. They live in bamboo huts whose long sloping roofs nearly reach the ground and preserve their own quaint costumes, dialects and customs – impervious to modern ways, walking a tightrope between survival and death.



The possibilities for research in this underdeveloped region of Thailand are infinite. We stayed at the Thanmachat Village Centre in Wang Keow, a purpose-built guesthouse providing facilities for researchers who wish to experience and study the rural way of life in the third world. The centre is run by Thais who also act as guides for walking excursions into the hills to visit the remote hill tribe villages.

Upon leaving the Golden Triangle, the academic is left with a yearning to return in later years to see how the region has subsequently developed and changed. A region that is unlikely to change dramatically in the years ahead, though, is the National Park island of Ko Samed, nestling in the South China Sea. There is no electricity on the island, nor mains water; accommodation is provided by bamboo beach bungalows and food is provided by idyllically located restaurants that overlook the beautiful bays and coves.

Pattaya originally developed as a coastal fishing village, some 90 miles from Bangkok. The aristocracy in Bangkok, though, soon found Pattaya to be an ideal weekend retreat and started developing the village as a small resort. The arrival of Americans in Vietnam in the 1960s created a need for a safe base where GIs could rest and relax, and it was in this decade that the new modern hotels were built along the promenade. In the 1980s Pattaya resembles a Mediterranean resort offering a wide variety of accomodation to the visitor and a great choice of daytime and nighttime activities and entertainment. One area of possible study would be to produce a profile of the tourist visiting Pattaya, both in demographic and psychographic terms, as there is definitely a male orientation in the type of entertainment on offer.

The students who travelled from Newcastle upon Tyne all gained a great deal educationally from the trip. Not only were they able to see some of the problems involved in international business but they gained a sympathy and perhaps an understanding of another race and culture so different from their own, and an appreciation of a fascinating way of life that few of their peers experience.

The author is lecturer in marketing at Newcastle upon Tyne Polytechnic.

The rise of the administrator

Geoffrey Lockwood on the CUA's silver jubilee

Geoffrey Lockwood

This year is the silver jubilee of the first national meeting of university administrators. In 1961 university administrators were fragmented within their institutions, isolated from colleagues and largely ignorant of both management techniques and the wider history and trends of higher education and its development. In 25 years the rise of the internal civil service and the growth of inter-institutional associations have not only eradicated those features of 1961 but have affected the basics of university management.

Universities, as such, have not been the object of much analysis, perhaps because most scholarship is undertaken by academic staff and because they have a vested interest in their base not being the object of analysis. While recognizing the existence of diversity and counter-trends, the early history of administration in universities consisted of two strands; ie the member of the academic staff undertaking administrative functions, in the monastic or church tradition, and the hiring of clerks to perform recorder roles, in the tradition of the professions and royal courts. Modern university administration developed from the interweaving of these two strands, though the two strands have not been entwined in some institutions even today.

The main development of what we now regard as professional university administration is the result of the combination of patterns of administrative recruitment in the later 1950s and the expansion of the universities in the 1960s. Manchester turned out to be its principal birthplace. The then registrar of the Victoria University of Manchester, Vincent Knowles, took the root of the first strand and grafted it into the second strand. He recruited first class graduates, before they had time to become academics, in the knowledge that their intellectual abilities would lead them to extend the "recorder" function into the realms of policy and management. That act of recruiting from the same elite as for academic staff but into career administration, and on the same basic terms of employment as academic staff, might have remained a peculiarity of Manchester but for the expansion which followed.

Manchester was able to export its notions and talent for two reasons. First, because the expansion itself greatly increased the volume of administrative work and created new universities receptive to professional administration. Second, the prospects for academic staff, in terms of both academic work and personal promotion, were such that many sacrificed the monastic tradition; and in effect handed over administration to the career administrator without knowing what they had done or what the consequences would be. Thus the 1960s saw the flowering of the internal civil service.

The principal features of the concept of an internal civil service can be summarized as follows:

- the administration is treated as an entity; a formal unit in the organizational structure, like the library or a faculty, with a single budget, plan, and establishment. An organizational boundary has become drawn around the administration and not its component offices or sections;
- the administration is staffed, in the main, with career administrators;
- those career administrators generally hold permanent appointments, after an initial probationary period, on conditions of service common to all universities, related to those of academic staff, but different from any other realm of public administration;
- the members of the administration are employed by the individual institution and have low external allegiances.

The British university administrator is, in the tradition of Bentham, Haldane and Beveridge, an institutional person dedicated to maintaining and improving that institution through good administration regardless of his or her personal allegiances.

- the administration is staffed largely by generalists, educated in the university system but drawn from a wide variety of disciplines, and they are trained while in employment. Ideally they will obtain experience of most facets of administrative work in a university.
- the style of the administration is characterized by the assumption that it has no decision-making powers; the dominating philosophy is that the internal civil service has influence through its advisory and information functions and its implementation role but has no power. In reality, and in certain areas and situations, the internal civil servants do exercise power and are effectively decision-takers but the image carefully obfuscates those managerial roles and places the emphasis upon service to decision-takers.

I wish to address two basic questions: first, have university administrators made the most of the opportunities presented by the expansion of the universities and by the pressures placed upon the universities by the environment? Second, has the direction of development of university administration set by the expansion of the 1960s been beneficial?

The first question is not simple to answer. Career administrators have increased vastly in numbers and in role while retaining their basic service functions. In many institutions, whether it was coping with student militancy in the 1960s, trade union pressure in the 1970s or the need for planning in the adverse conditions of the 1980s, the administration has frequently taken the lead and individual administrators suffered the consequences. People recruited to university administration with no knowledge of the histories of universities, the legal status of universities, the world of estates management, the nature of accountancy etc have both trained themselves in those fields and become adept at handling them. The basic roles of the internal civil service of the 1960s have been extended very considerably and many new ones added.

> The existence of a servant class has led the academic staff to escape from responsibility

The negative side of the balance sheet has been outweighed by the positive but remains significant. The infusion of high grade graduates into administrations in the 1950s and 1960s led them to replace academic staff in administrative work but to retain distinctions between themselves and the executive/clerical levels of staffing. Over the years that distinction has become increasingly dated, partly because of the employment of graduates in the executive/clerical grades, partly because of the impact of office technology but mainly because it has inhibited the necessary qualities of vertical integration and flexibility which a modern administration should possess.

The line of development already mentioned has tended to lead to a demarcation between the roles of academic and administrative staff. The existence of a class of administrative "servants" has increased the ability of the academic staff to retreat from responsibility, from facing the daily realities of coping with administrative problems arising out of their own work, and from the realities of the impact of changes in the external environment upon the future of the university and their own work. The demarcation has prevented the administrative staff from getting involved, in the main, in the management of the academic heartland. The administration of a university would be very much about the usage and productivity of its prime resource (the academic staff), about the nature and efficiency of teaching methods, about the structure and relevance of curricula and so on, yet administrators feel reluctant to enter those areas.

Another element on the negative side of the balance sheet has been the failure of administrators to either see or plan ahead. The quality of the talent recruited into university administration must have been well above the average for all professional occupations. Should such an amount of talent have been attracted into university administration? If so, should not more care have been taken to either increase the low ceilings of responsibility and reward compared with the professions and industry to ensure that the individuals would obtain credentials which gave them external transferability.

In practice, the history of the development of the occupation in the 1960s proved to be too strong for its leading members and its younger radicals to take steps in the 1970s either to improve its status or to provide for external transferability. The training and qualifications received remain unique to the world of universities and the majority of administrators remain in favour of the rewards being what is termed "academically-related" (which in practice meant and means lower average salaries than the academic staff). The result, of over-worked talented administrators becoming underpaid, underrecognized and dissatisfied, was foreseeable, and will become even more plain as the realities of economics and change bear even more strongly on universities in the next decade.

One more negative point has been the relative failure to match the generalist ethic of the national Civil Service, and thereby to enhance internal mobility across specialist boundaries. In a few universities it is possible for people and duties to shift across the boundaries of financial, estates, academic, constitutional, informational, personnel, careers guidance, social, business etc administration as institutional priorities change and in order for the individuals to obtain experience. But that is not the norm in most universities because the internal civil service model has not been adopted in areas outside the academic/secretariat administration mainstream. That situation stems partly from two basic and desirable features of university administration. First, that each university is an independent corporate body with freedom of choice as to how it structures its administration. Second, that each university is the employer of its administrators, can determine their conditions of service, and can decide whether to recruit administrators from within the ranks of university administrators or from those with backgrounds in academe, public service, industry, the media etc.

It is doubtful if the universities could have expanded so rapidly and smoothly without the new class of administrators and it is equally doubtful if the universities could have survived the disruptions of student militancy and the new world of trade union negotiations without the full-time care of professional administrators. Similarly with facing the newer challenges of marketing and economic restraint.

In terms of value for money the benefits stand out markedly. The universities have had large areas of work undertaken by staff on lower salaries than academic staff and who perform for 46 weeks a year and 40-plus hours a week; the only real alternative would have been to use more expensive academic staff time given grudgingly by people who would rightly have retained their prime academic loyalties, in terms of time and personal commitment. Trained career administrators have coped better, qualitatively and quantitatively, with the intricacies of personnel legislation, the administration of admissions, the application of national definitions and codes, the devising of budgetary systems, the forecasting of student numbers, the management of premises, the launching of university companies, the legal work on appeal cases, the formulation of regulations to comply with charters and natural justice, the devising of publicity and public relations campaigns, and all of the other facets of university administration. I'm often asked by administrators about the paucity of reference to administration and administrators in the Jarratt report. My answer is that the report reflected accurately the state of university administration in it is essential and important but subservient and of low status. The report has rightly been called an "administrators' charter"; no university can implement the proposals in the report without both an increase in the administration and a more responsible and dynamic role for its administrators, with inevitably a higher profile for them within and outside the institutions. But why was that not stated explicitly in the report? The answer lies in two further questions. Would the majority of the committee have endorsed such an explicit recognition? Would such explicit recognition have damaged severely the chances of universities implementing the report?

The development of the administrator in the universities since the 1950s has benefited those institutions and has been broadly along the right lines. However circumstances have now changed and will change further. The nature and style of university administration needs to adjust. Those circumstances are the impacts of the economy and demography which have created economic recession in the universities, increased competition between universities, the need for new marketing strategies and new markets, the essential necessity to convince the public and politicians of the value of investing in the university and so on; the impact of technology in regard to teaching and administration has yet hardly been taken on board outside the Open University; the increased pressures for accountability, litigation, fair play etc which will lead to more formalization of internal procedures, greater ability to openly defend decisions and judgements, and so on.

In general those trends mean that the administration will not only be fighting for an increased share of declining institutional resources but its work will become much more intrusive and threatening internally. Its work is going to restrict and control much more of the lives of all members of the university. A primary task, therefore, is for administrators to be more positive in explaining their value.

> The barrier between executive and administrative classes must be removed

Adjustments to the internal civil service model are also needed. For example, internal horizontal mobility remains far too low in most universities and the barrier between administrative and executive classes needs to be removed. I also favour breaking the academic-related nature of financial rewards as that relationship has led to the differentials between the inefficient and the efficient administrators being too low, to the inability to pay for some jobs by results, to the lack of rigorous appraisal schemes and to the salaries of administrators in universities falling behind those in equivalent occupations.

A further adjustment is that required to take full advantage of technology. Despite the major introduction of administrative data processing over the past 20 years we are only just at the dawn of the full impact of office technology, and it needs to be planned for. In structural terms its effects will include a reduction in the numbers of administrators (but a rise in the costs of administration) and an increase in inter-institutional consortia (not even the largest university should decide to finance on its own the costs of in-house software). The internal civil service of the future should be more flexible, slimmer, better supported by technology and more geared to inter-institutional cooperation in technical matters; and staffed by personnel whose rewards are more related to performance.

The civil service needs to recognise more clearly that it is the agent of the council of the university. Most administrators of the pre-1980s generation, despite the provisions of the charters of the institutions to which they were recruited, believed that their job was solely to service the internal academic community – and the senate in particular.

Second, there is the question of the relationship to the vice chancellor or principal. Despite the prevailing image, the charters and statutes of most universities make this an ambiguous relationship. They recognize that the vice chancellor is the chief academic and administrative officer but they also separate the registrar or secretary's role into being responsible directly to the council for certain (mainly secretariat functions) but responsible to the vice chancellor for general administration. Hopefully over the next decade most universities will appoint vice-chancellors who are capable of fulfilling, and determined to fulfil, the "chief executive" role so that the charter ambiguity is removed and it is clear that the internal civil service is fully responsible to the council through the vice chancellor.

Equally, the internal civil service has to adjust to having members of the academic staff within its ranks. We are all familiar with the current interfaces between an administrative secretary to a faculty and an academic assistant dean on an admissions officer and an academic chief selector etc but I am suggesting that many areas of activity might be administered or managed by mixed teams of administrators and academics all of whom will be counted in resource and organizational terms as being on the administration budget. It makes sense that admissions marketing and recruitment should be managed by such a mixed team, with its members being equal but bringing different skills and competences to bear. It means that administrators will have to get used to working administratively with academic staff, rather than servicing them, and that some members of academic staff will have to get used for a few years to administrative styles and conditions of work.

Administrators should increasingly accept responsibility. They cannot simply sit behind their desks and react to others; they are part of management and not just administration. Moreover, administrators will need to exercise competence over broader ranges of skills and with a deeper knowledge of the academic heartland of their university.

These assertions do not require any change to university governance, they require administrators to accept the institutional responsibility for which they are paid (lowly though that might be) and that such responsibility should be exercised under the constitutional authority of the council and the vice-chancellor in partnership with lay and academic colleagues. It does, however, mean a change of attitude in some universities away from concerns about internal distributions of power and status and towards making full use of the abilities, experience and industry of all members in the strategic management necessary for survival and development.

The form of university administration we know today is largely the product of the circumstances of the 1960s but the form and the roles in AD 2000 will be similarly shaped over the next five years or so.

The author is registrar and secretary of the University of Sussex.

Brian Morton previews Channel 4's new series *Sinfonietta*

The sound of the city

Sinfonietta
Channel 4
Sundays at 8.15 pm from April 13

We're still a long way from understanding or accepting the music of early-century Modernism. Picasso and Matisse have all but lost their power to shock or startle; Schoenberg and Webern are still bogeymen; *Gurrelieder* and *Pierrot Lunaire* are somehow further from us than "Les Demoiselles d'Avignon" or even "Guernica". Channel 4's excellent prime time series *Sinfonietta* is a bold attempt to make some of this music a little more accessible, but without drawing its sting.

It is a bold stroke to put Charles Ives and Anton Webern in tandem in the first programme, "A Universal Singing", somewhat akin to billing Dario Fo and Samuel Beckett side by side: Ives anarchic, eclectic, unintellectual, above all *loud*, Webern cerebral, rarefied almost to the point of silence. It quickly, audibly, makes its point – and the point of the whole series – that 20th-century music expresses a radical break with the classical tradition and a new beginning. To place the still undervalued Ives first makes perfect sense for in Ives's work we can still hear dissonant, out-of-key signals from the past, very literally interrupted by the "noise" of the modern world. "A Universal Singing" begins with a *sforzando* of traffic noise from Holborn Circus, quickly followed by the quiet from which Webern emerges. On the face of it, "Central Park in the Dark" might have been the better Ives piece to sample in the context but the heart of the programme is a long excerpt from Ives's raucous "Three Places in New England", performed by the London Sinfonietta (who give the series its rather unpromising name).

The second programme, "Ghosts", begins with an equally startling juxtaposition. Schoenberg's "Song of the Wood Dove" from the hypertrophic *Gurrelieder* is set against his *Pierrot Lunaire*, demonstrating broadly the same shift as that from Ives to Webern, a move away from chromaticism and Romantic "expression" to a disturbing, alienated music that draws almost nothing from past musics. As pianist Paul Crossley says in his commentary, *Pierrot Lunaire* never loses its shocking impact, even after no matter how many repetitions. Unlike the voice of the Wood-Dove, words to music are not made to fit; Schoenberg's *Sprechgesang* device blocks any expectations of lyrical "meaning" or instrumental "accompaniment".

"Song of the Wood Dove" is performed against a chintzy background, reminiscent of a Viennese salon, with performers in boiled shirts and ballgowns. For "Pierrot Lunaire" the vocalist disappears behind blank commedia dell'arte make up, while the musicians sprout animal ears, phallic red noses and whiskers. The effect may be a little distracting; later programmes use even more elaborate stagings, a full-dress production of Igor Stravinsky's *Renard*, London's Triton Court for a performance of Olivier Messiaen's *Couleurs de la Cité Céleste* and Ayers Rock in Australia's Northern Territories as a backdrop to Edgard Varèse's *Intégrales*. It's always a moot point how best to wrap music visually; where there is no dramatic action, there is always the danger of suggesting an irrelevant or inappropriate "programme". Significantly, the most arresting and effective visual coup in the first two programmes is the simplest. Webern's *Five Pieces for Orchestra* are contained within a single camera shot, no pans, no zooms, no cuts – pieces divided from the others by a simple change of lighting; anything else would have been a fatal distraction from Webern's extraordinary reflected score.

Not the least of the series's successes is its presenter. Paul Crossley is probably the ablest interpreter of the modern piano repertoire, a brilliant exponent of Messiaen. Working with five different directors, he provides clear, unbackneyed paths of entry to some very difficult music. The scripts are his own and this, almost inevitably, puts conviction and commitment behind the words. A slightly mannered delivery becomes less rather than more evident as time passes.

Channel 4 bids fair to become a contemporary music's most effective champion. *Sinfonietta* is a remarkable venture and deserves every success.

ARTS OF THE ARTS

If many of Britain's film directors learn their craft in television, says JOHN WYVER, the larger screen is thereby the richer.

Alive and well?

Television has long been blamed for the decline of British cinema audiences in the 1950s. But more recently it has been the creative inadequacies of British films which have been ascribed to the influence of the small screen. For it is clear that television has served as a training ground for most of the directors making their debut features in the past decade; and television, it is argued, is a reduced medium, dominated by words and unable to deal with the subtlety, ambiguity or poetry of film. Ergo, blame television if many of the current British films fail to impress, or excite, or engulf you.

In different ways the legacies of the 30-second commercial (from which Alan Parker, Hugh Hudson and Ridley Scott graduated), of the pop promo (Julien Temple, Steve Barron) and of television drama (Roland Joffe, Richard Eyre) are all held to have been detrimental to British cinema. Commercials are said to have spawned a cinema, of which the most recent example is *Revolution*, which is dominated by the art director and in which obsessive visual style is more significant than the telling of a story or the exploration of emotions. *Absolute Beginners* is judged a disappointment because it is a succession of set pieces, each with the span and style of a promo, which has no coherent structure or narrative development. And as for television drama, according to Alan Parker, "it is wonderful that we do it, but I don't think for one moment that it is anything to do with cinema".

This last opinion is challenged this month by a season at the National Film Theatre (programmed by the present writer), which pairs television with cinema dramas made mostly in the 1970s with features by the same directors produced more recently. Television drama's history remains largely unexplored and undocumented and so it is important that major films like *Gangsters* (BBC, 1975, directed by Philip Saville) and *No Mama No* (Thames, 1979, Roland Joffe) can be re-seen and re-evaluated in contexts such as this.

The television films have been chosen partly as direct ripostes to the dominant myths about such drama. David Hare's *Licking Hitler* (BBC, 1979), for example, is a dark, powerful fable about postwar Britain. Set mostly at a wartime "black propaganda" unit, deep in the heart of the English countryside, it is a film which exploits the nuances of visual style with far more confidence and to a greater effect than most cinema features. And *Penda's Fen* (BBC, 1974, directed by Alan Clarke) is a mysterious fantasy of ancient history erupting into the modern world. The intellectual ambitions of David Rudkin's script and the precisely disciplined and frequently startling use of disparate images are all but unrivalled on either the large screen or the small.

One implicit argument of the season is that far from impoverishing our cinematic tradition, television filmed drama has contributed in many positive ways. Director Roland Joffe, for example, may have moved onto the epic canvas of *The Killing Fields* after he left television, but much of that film's organizing intelligence and its brilliance with actors is the product of Joffe's earlier work on dramas such as *The Spongers* and *United Kingdom*.

The question is a complex one, answers to which are confused further by television's increasing involvement in the financing of features. Channel 4's "Film on Four" strand has pioneered this, and has given directors like Richard Eyre their first opportunity to work on a larger scale. Eyre made *The Imitation Game* for the BBC in 1980 and then shot *The Ploughman's Lunch* from another script by Ian McEwan for "Film on Four". In this case there was no compromise in the focus on contentious issues of the day, but "Films on Four" are protected from the real imperatives of the market. Could the equivalents of *The Ploughman's Lunch* be made without television's involvement?

One hopeful sign is the success, both here and now in American cinemas, of *My Beautiful Laundrette*, directed by Stephen Frears from a script by Hanif Kureishi. Frears made many of the most exciting television dramas of the 1970s (including *Last Summer*, Thames, 1976, and *Long Distance Information*, BBC, 1979, both of which are in the season). *My Beautiful Laundrette* is in the tradition of these earlier films, and indeed was intended to be seen only on Channel 4. But its uncompromising and clear-sighted look at Britain now has proved at the box office that there is a market for such work.

Ten years ago, it was a critical commonplace that the British cinema was "alive and well and living in television". The present situation is quite definitely not British television alive and well up on the silver screen. Rather, the crossing over of many of the finest talents has enriched and enlivened the older medium. Which must, at least, be a cause for modest celebration by those who care about both industries.

"Alive and Well" continues at the NFT until the end of April, the season including several evenings dedicated to the work of single directors. On Monday April 14, for example, Richard Eyre's BBC play The Imitation Game *(6.15) is followed at 8.45 by* The Ploughman's Lunch. *And on Thursday April 24 Stephen Frears's Thames play* Long Distance Information *(6.15) is followed by* My Beautiful Laundrette. *Works by Roland Joffe, David Hare, Michael Radford, Brian Gibson and Alan Clarke can also be seen.*

"Dancing woman," 1911, by Ernst Ludwig Kirchner from the exhibition "In Tandem" reviewed below.

Events

Continuing exhibitions:

To April 13. Scottish National Portrait Gallery, **Edinburgh**. Nineteenth-century photography.

To April 19. **Humberside College of Education**. Work by staff and students of the architecture school.

To April 29. Collins Gallery, **University of Strathclyde**. *The View from Above:* 125 years of aerial photography.

To May 2. Triangle Centre, **Aston University**. *Take One:* British film stills.

To May 4. City Art Gallery, **Yeovil**. *The Print in Germany 1880–1933.*

To May 9. Newcastle Polytechnic. *New Image Glasgow:* young artists from the Glasgow School of Art.

To May 10. Whitworth Gallery, **University of Manchester**. *Reflections of Venice:* the influence of Venetian glass in Victorian England *1840–1900.*

Concerts:

April 22. **University of Lancaster**. Manchester Camerata, conducted by Denis McCaldin with Penelope Rosekell (piano) in a programme of Mozart.

April 22. Arts Centre, **University of Warwick**. Philharmonia Orchestra, with Vladimir Ashkenazy (conductor/soloist): programme includes Mozart's piano concerto No 14, (K449).

April 23. Assembly Hall, **University of Strathclyde**. University Chorus and University Chamber Orchestra: Beethoven's Choral Fantasia in C, Op 80.

April 24. **Westminster Cathedral**. St Bartholomew's Choral Society in conjunction with the City University: Schubert's Mass in G; Vivaldi's *Beatus Vir.*

April 26. **University of Essex**. Colchester Institute Symphony Orchestra with John Lill (piano): programme includes Brahms's Piano Concert No 1 in D min, Op 15.

April 29 to May 1. **Royal Academy of Music**, London. Student production of Stephen Sondheim's *Sweeney Todd.*

Taking up chisels

In Tandem: the painter-sculptor in the twentieth century
Whitechapel Art Gallery
until May 26

Few are those painters and sculptors who have never transgressed the boundaries of their "métier", whether of their own free will, or coerced by some wilful patron. The now apocryphal story of how the Sistine Chapel frescoes came into being stands as a famous example of the way the greatest sculptor of all times was forced by just such a patron to abandon his marble and pick up the brushes.

How reluctantly he must have obeyed though, is well documented in the endearing invective between him and Leonardo da Vinci: painting versus sculpture – the famous paragone – only reinforcing their close relationship, which is the central theme of the current exhibition at the Whitechapel gallery.

The examples selected, ranging from Degas to Clemente, Baselitz and Schnabel span exactly a century, ours, when more than ever before the borderline between categories had all but vanished. Little wonder, since the very concept of art, notoriously elusive at best of times, no longer has even a working definition.

Looking at the impressive selection on show, it is easy enough to overlook a crucial point, not helped by the ambiguity of the title: this is an exhibition of paintings and sculptures by artists who are primarily painters. In theory, then, it should have revealed some common denominator of the way painters tackle sculpture. But in fact all that emerges – over and above the consistently high artistic standard – is that the relationship between painting and sculpture is always changing.

Thus, for Degas, Matisse and in fact all their generation, sculpture is complementary to painting, justifying the idea of "tandem". The show enables the viewer to play compare/contrast games, as several versions of the same subject are gathered together. There are four Degas bronzes: "Dancer Looking at the Sole of Her Right Foot", only two of which are normally accessible because they belong to public collections. The closer we come to the present, this simple relationship becomes so much more complex as to be impossible to grasp. In fact one begins to wonder whether it is no longer there.

When one comes to compare, say, Clemente's rather tedious fresco "The Magi" and his exciting "1152 1987" – consisting of 63 identical little "homunoids" made of papier mache and earth, one realizes that the attempt to establish a relationship is actually of little importance. The fact is, that like every other artist in this exhibition is a painter and a sculptor – quite separately.

Sanda Miller

BOOKS

Social drama and the anthropologist

by Adam Kuper

On the Edge of the Rush: anthropology as experience
by Victor Turner
University of Arizona Press, £27.50
ISBN 0 8165 0949 2

Victor Turner, one of the most famous modern anthropologists, died in 1983, at the age of 63. This collection of essays has been edited by his widow and collaborator, Edith Turner. In an informal biographical introduction, she describes how Turner, a conscientious objector during the war, went into anthropology when peace came. He fell under the influence first of Marx and then of the only remotely Marxist British anthropologist of the older generation, Max Gluckman, whose *Economy of the Central Barotse Plain* "Vic read aloud to me while I was sewing the children's clothes".

Under Gluckman's aegis he carried out fieldwork in Central Africa, among the Ndembu people. His doctoral thesis, *Schism and Continuity in an African Society*, published in 1957, was the outstanding monograph produced by a member of Gluckman's "Manchester School". Gluckman had begun to break with the established structuralism of Radcliffe-Brown and Evans-Pritchard, and was emphasizing the study of social process and conflict. Turner's monograph embodied this new perspective.

According to Turner, the Ndembu villages were riven by conflict, notably over women and children – the key labour resources. A man retained claims to his sisters' children, and competed with his brothers-in-law for the allegiance of their children. "Thus both marriages and villages are inherently unstable," Turner explained, "and in-laws struggle continuously for control over women and their children". These conflicts were inherent in the rules of the Ndembu game. There were other institutionalized conflicts as well, notably those pitting men and women against each other. Gluckman's theory was that every social structure generated its own appropriate lines of conflict – but that these institutionalized conflicts could also serve the community in sometimes unexpected ways. Turner agreed. Both a brother and a husband phrased their competing claims in terms of a shared set of norms, and so in their struggles they actually strengthened the moral basis of the community. "Conflict is endemic in the social structure but a set of mechanisms exist whereby conflict itself is pressed into the service of affirming group unity."

Traditionally, anthropologists were accustomed to telling more or less illuminating anecdotes to make their theoretical pronouncements more plausible. By the sixties, statistics were becoming a little more popular than they had been in a generally rather innumerate profession, and Turner's Ndembu study offered impressive tabulations of demographic and genealogical information. But Turner also invented a new way of focusing these issues, the "social drama". Instead of the traditional apt illustration, the reader was told a story. A linked series of episodes, dramatizing the conflicts in a community, gave substance to more formal descriptions of social process.

Initially this was mainly a presentational device. Later Turner tried to give it more weight, suggesting that social processes were often – perhaps necessarily – social dramas. There were in-built frictions at the heart of every social institution, latent conflicts in virtually every relationship. Periodically such a conflict would erupt in a public crisis. But there were also conventional means of dealing with such crises, and the strains inherent in the relationship would be resolved for a while by way of a catharsis and reintegration.

In one of the oddest social dramas in the book, his widow recalls how Turner nervously presented this idea for the first time in a Manchester seminar – always a risky business, for any new idea could be squashed forever if Gluckman took against it.

With controlled excitement he read the story of Sandombu and he analysed its stages – breach, crisis, redress, reintegration – the social drama as the window into Ndembu social organization and values. Now you see the living heart. Max sat, his hands folded on top of his bowed bald head. When it was over he raised his head, his eyes burning. "You've got it! That's it!"

Gluckman was a powerful character, brooding, moody, but able to foster the creativity of the men he gathered round him – though, as he remarked, the best left. Turner was the very best, and he was among the first to go, leaving in 1963 for America, where he was to spend the rest of his career.

On the brink of departure, Turner formulated his second genuinely influential idea, which had to do with what Van Gennep had called liminality, the moment of social and cultural exile which every novice experiences as he is initiated into a new social role. Turner argued that "the essence of liminality is to be found in its release from normal constraints, making possible the deconstruction of the 'uninteresting' constructions of common sense". In this state of liminality, a person passing through a transition was outside society and culture. Turner sometimes suggested that in this blessed state man could briefly achieve the selfless empathy to which mystics traditionally aspire, and which he called *communitas* (glossed, in his most prophetic phase, as "the implicit law of wholeness arising out of the relations between totalities"). This glorious prospect inspired many scholars concerned with the study of ritual, perhaps because they sensed the possibility of a non-denominational religious experience, open even to anthropologists.

Victor Turner

In the fifties and sixties, Turner published a series of essays on Ndembu ritual, which cumulatively provided one of the most sensitive and detailed accounts we have of a traditional African religion. Subsequently his writings became less ethnographic and more abstractly theoretical; and, to the "Manchester School". Gluckman had less interesting, though they achieved a considerable reputation among theologians and literary critics.

There are three main theoretical strands in Turner's middle period, which is the period represented most strongly in this collection. First of all, there is an increasing concern with process at the expense of structure. (At times Turner claims that this shift must occur – is occurring – universally. He even suggests that it is integral to post-modernism.) Secondly, partly in order to grasp process, the "social drama" metaphor is developed, and the notion of "performance" introduced. A ritual is to be seen as a performance, a rather free interpretation in which the actor has the chance to be creative, and to express his own personality. Thirdly, he began to talk about "reflexivity", by which he meant the ways in which social action – including ritual and indeed ethnographic fieldwork – make the actor conscious of latent social and psychological processes. The social drama now becomes "a kind of meta-theatre . . . a dramaturgical language about the language of ordinary role-playing and status maintenance which constitutes communication in the quotidian social process".

The faults of the later Turner are precisely those which British academics, in more self-confident days, used to believe were typically American. This is tricky ground, though clearly there are dangers in the sort of adulation which a fashionable intellectual can attract in America, and which Turner certainly enjoyed in a relatively modest way.

More to the point, perhaps, was Turner's penchant for absolutist ideologies. As a young man he was a Marxist. He then became a follower of Max Gluckman, one of Nature's communists. He was attracted by the systems of both Freud and Jung. And at last he became a devout Catholic. Moreover, each of his beliefs was lived to the full. This sort of commitment feeds bombast rather than intellectual innovation. Perhaps he was fortunate that one of his idols, Max Gluckman, was alive, so that for a creative decade he kicked against him and produced ethnographic analyses as good as those of any contemporary.

But in the end Turner's later career must be understood mainly with reference to his intellectual environment. He was a product of the confident functionalist generation of British social anthropology. By the seventies its certainties had collapsed, and even its most creative representatives found themselves at a loss. Some turned inwards, playing obsessional games with increasingly fusty traditional models, restricting themselves to an impotent formalism. A few found that varieties of structuralism provided fruitful options. Others abandoned any theoretical ambitions and proclaimed themselves pure ethnographers, or even historians. Turner was not a natural theorist, but he reacted emotionally – even with a certain religious horror – to the structuralist challenge. This horror was most deeply expressed in the contrast he drew between the experienced reality of fieldwork, which he sometimes compared to a pilgrimage, and the abstractions of the structuralists. "Anthropological fieldwork," he writes in one of the essays in this book, "surely deserves its very own kind of *experiential theory*, its own edifice of practical, yet poetical, knowledge". Perhaps so, but this experiential theory evaded his grasp.

Turner's real strength, his fundamental commitment, was to the description and analysis of a foreign way of life; but it was a restless commitment. He was never content with the atheoretical – almost anti-intellectual – empiricism which overtook many British social anthropologists. He was always on the lookout for new ways of describing, new analytical insights. And he was a superb ethnographer, perhaps one of the half dozen best fieldworkers of the century. Oddly enough, there are some excellent ethnographers who cannot get on with people in their own communities. Turner, however, was also a warm and sensitive man who was much loved by friends, colleagues and students.

Adam Kuper is professor of anthropology and head of the department of human sciences at Brunel University.

Women winnowing sorghum in Lesotho

Visions of cultural totality

Culture, Thought and Social Action: an anthropological perspective
by S.J. Tambiah
Harvard University Press, £25.50
ISBN 0 74 17969 2

Although Professor Tambiah is best known as an ethnographer of South and Southeast Asia and of Theravada Buddhism, this collection of essays reveals his productivity in the theory of social anthropology as well.

In the period in which he wrote them, 1967 till 1984, he was concerned with three exotic styles of thought which came gradually to seem natural in British anthropology. The first was Lévi-Straussian structuralism, the second linguistic philosophy in the vein of Peirce, Austin, and Searle, and the third grand social theorizing about historical civilizations. By showing how useful such viewpoints could be in dealing with ethnography Tambiah helped domesticate them for everyday anthropological use. He also helped show that anthropologists can improve on their predecessors' interpretations of a set of ethnographic data. If Tambiah was not always the first, he was certainly among the most energetic in pursuing these ends.

The essays range from the widely quoted series on ritual and magic ("The Magical Power of Words", "Form and Meaning of Magical Acts", "A Performative Approach to Ritual") to others on the nature of Southeast Asian states ("The Galactic Polity in Southeast Asia", "A Reformulation of Geertz's Conception of the Theater State"). Of the 11 essays, nine have not previously been printed. Some are already very well known, such as the one on Thai animal classification ("Animals are Good to Think and Good to Prohibit"). Others ("A Thai Cult of Healing", "On Flying Witches and Flying Canoes") are chiefly ethnographic. The conclusion, "An Anthropologist's Creed", is a topical and second-sighted commentary on short-sighted governmental policies.

Despite this diversity Tambiah asserts that the volume possesses a fundamental unity, a claim set forth in the introduction and enhanced in the arrangement and partial re-writing of the essays. The unity lies in the practice of "totalization" or "the construction of totalities". This is really a methodological injunction, a plan for anthropologists to meet the complexity of social life head on by constructing complex ("total") interpretations. In the first section he applies this injunction to magic and ritual, and in the second to cosmologies.

It must be said that this injunction, like many in the book, is couched in neither the clearest nor the most felicitous language. Nor is it new to anthropology, which among the social sciences has perhaps most devoted itself to constructing wholes, that is, to using eclectic and complex explanations. Nevertheless Tambiah's actual practice is frequently excellent and emulable, and even a third or fourth reading reveals much that is extraordinarily interesting.

The three essays on magic and ritual demonstrate the practice very clearly. In the first, on "The Magical Power of Words", Tambiah shows that Trobriand magic, quite apart from its apparently misconceived instrumental purpose (more yams and successful storage huts through spells and incantations), also possesses a coherent and suggestive imagery . . . *and* that it is addressed not only to yams and huts, but also to the moral sense of participants. They are indirectly enjoined to control their consumption of whatever yams they get. The "totalization" consists therefore in two moves, first adding a layer of poetic sense to what Malinowski had regarded as nonsense, and then adding a layer of ethical force to the poetic sense. Trobriand magic turns out to be a greater, more sensible, and more complex matter than Malinowski had realized.

In the subsequent essays Tambiah then erects this insight into general statements not only about the nature of Trobriand magic, but also of magic and ritual in general. Here he introduced the philosophical term "performative" to designate words and acts which are not merely descriptive or figurative, but are also used to achieve social ends. The whole argument is stimulating in the most fruitful sense: it not only reveals unsuspected facets of ritual but also, by proposing bold and controversial hypotheses, goads us to further development.

The notion of totalization (the term adopted from Sartre) is more at home where Tambiah writes in the second section of classifications, cosmologies and monarchical states. Totalization is especially relevant in explaining whole polities with their economic, political and symbolic complexity. In perhaps its most trenchant application, Tambiah criticizes Geertz's representation of the Balinese state as theatre. Geertz relied too heavily on the aesthetic and symbolic peculiarity alone of Balinese states, and discounted the importance of their perennial bloody succession struggles. But in that respect Bali differs little from the Southeast Asian states with which Tambiah is more familiar. And there, argues Tambiah, the contest for personal hegemony, far from being enacted off-stage, contributed along with ritually enacted cosmology to the total form of the state.

But perhaps the most interesting use of "totalization" Tambiah reserves for the concluding exhortation to his colleagues. There he proposes that anthropologist owe not only a scientific, but also a moral duty to cultivate a total, that is a synoptic and comprehensive, view of human societies. Only if they do so can they correct the narrow technocratic considerations that so dominate our collective life. And then anthropology could become a moral science, as our forebears thought it might be.

Michael Carrithers

Dr Carrithers is lecturer in anthropology at the University of Durham.

BOOKS

Morality of sex

Sexual Desire: a philosophical investigation
by Roger Scruton
Weidenfeld & Nicolson, £18.95 and £8.95
ISBN 0 297 78877 9 and 78479 X

Sexual desire, Roger Scruton tells us, is born, not of instinct or biological impulse, but of intentions. And what do we intend? The embodiment of ourselves in the body of another, the experience of the unity of our body and soul in physical conjugation with the body and soul of another. Our sexuality, on this reading, is not an appetite like hunger. If it were, John would suit our instincts as well as Jim, Mary as well as Elizabeth. It is the singularity of Elizabeth or Jim, the embodiment of their particular being in the lustre of their hair, the grace of their movement, the frankness of their returning gaze which our desire seeks as an arrow seeks its target.

These characteristics of desire – that it is governed by intentions, that it seeks the union of specific persons, that it finds its satisfaction, not in orgasm per se, but rather in a process of mutual embodiment (the word is Sartre's) – all this means that, yes, dogs do it, birds do it, even the bees do it, but none do it like we do it. Scruton argues indeed that other species do not know desire at all. Only humans have managed to transform the biology of sexual attraction into the intentional ritual of desire.

Scruton's aim is to re-connect the theory of sexual desire to the philosophical tradition of inquiry into the nature of human intentionality, personal identity and language, and thus to break the current monopoly hold on the subject of those incautious sociobiologists, sexologists and crude Freudians who eliminate the specificity of human sexuality by describing it in the pseudo-biological terminology of libido, instinct and appetite. He makes a strong case that the late Victorian chimera of a science of sexual desire – which runs from Krafft-Ebbing to Freud, from Kinsey to Masters and Johnson – has actively contributed, not to liberation but to sexual self-alienation in the populace at large. By thinking of sexual desire as a fixed quantum of libido which cathects or adheres to objects, Freud obscured the intentional paths which guide object choice. The objects we desire do not release a dam of pre-existing libido; it is the interplay of our intentions for each other which creates the energy for consummation. Freudian theory blinds us into thinking of libido as an energy-source stored up in the human battery, and hence to conceive of the sexual impulse as an amoral appetite deflected and dammed by the barriers of guilt and shame. On the contrary, Scruton argues "sexual desire is not impeded by morality, but created by it".

The relation between sexual desire and sexual morality is the core of Scruton's project. His task is explicitly Aristotelian, to explore the extent to which a normative philosophical anthropology of what it would be good for men to desire can guide us in practical moral choice. It is at this point that Scruton fails to make plain whether the moral claims advanced are entailed in his theory of desire or, a much weaker claim, merely a desirable inference.

He does succeed, it seems to me, in rehabilitating the notion of perversion as a moral category, giving us good reasons for understanding why necrophilia, paedophilia or sexual relations with animals violate a proper conception of what sexual relations ought to be: namely relations between persons capable of the specific forms of intentionality and willing described in his theory. His claim that homosexuality, if not a perversion, then at least is understandably regarded as such by heterosexuals seems to me to be on much weaker ground. The argument is that homosexual desire is narcissistic, solipsistic, a failure to embark on the voyage across the gender barrier. Here Aristotelian highmindedness shades into narrow-mindedness. If homosexual relations meet all the criteria of interpersonal responsibility which he sets out, why should they be regarded with opprobrium simply because they do not take upon themselves the voyage across the divide of gender?

Nor did I find myself convinced that monogamy and marriage follow as entailed moral consequences of Scruton's theory of desire. Even if one follows Scruton's path of complete metaphysical and physical engagement with another in the moment of sex, what exactly is it that makes it wrong to have this depth of engagement with someone else as well?

In general, Scruton's moral derivations from his theory of desire are convincing where little real controversy exists: I mean who does not think necrophilia is a perversion? It is of very little assistance in the commoner areas of sexual betrayal: there is nothing in the Scruton argument to help a man or a woman who conscientiously feels that they love two people equally. Where love and duty point in different ways, no amount of Scruton's philosophy will help you. To which he would justly reply, No one can help you. If this is true – as it undoubtedly must be – then it seems less clear to me – a non-philosopher – just what the relation is between the descriptive theory of desire and the prescriptive theory of morals.

Yet I am not sure that these disagreements with his moral conclusions matter that much. For the chapters patiently unravelling the intentional logic of desire are so richly argued, so beautifully supported with apt and often moving quotation from the poets, that simply for rescuing the full philosophical dignity of the subject from the hands of the sexologists, we should be grateful for the appearance of this austere, difficult and magisterial book.

Michael Ignatieff

Michael Ignatieff's latest book is "The Needs of Strangers".

Auguste Rodin and "The Thinker", a photograph by Edward Steichen, taken from a new book by Albert E. Elsen, *Rodin's Thinker and the Dilemmas of Modern Public Sculpture* (Yale University Press, £22.00 and £8.95).

Eminence grise

Education, Values and Mind: essays for R. S. Peters
edited by David E. Cooper
Routledge & Kegan Paul, £12.95
ISBN 0 7100 9905 3

Richard Stanley Peters was professor of philosophy of education at the University of London Institute of Education from 1962 to 1983. He was not the first holder of this chair and it is to be hoped that he will not be the last, though the post is still frozen. No doubt economic considerations are largely responsible for this, but it may also be asked whether the university's inability to find a suitable candidate in 1984 had not also something to do with the way Peters interpreted his calling.

When Peters came to the chair he had already established himself in the contemporary tradition of analytic philosophy. His magnum opus, *Ethics and Education*, looked like an attempt to cast educational reflection in this mould. The book contained a good deal of conceptual analysis, especially of "education" itself. However, it is now clear to almost everyone that the entire work, for all its good sense and philosophical seriousness, defended a particular view of education on the basis of assumptions that are by no means neutral, as Peters claimed. In short, it was a kind of liberal manifesto for education which still attracts many people today.

Had Peters been a university professor of average quality, this influential work and its successors might have been his sole claim to fame. Instead, by a combination of hard work, personal integrity, determination and good luck, he played a leading part in the transformation of the institutionalized study of education. What Peters used unashamedly to call the old "mush" of educational studies became the differentiated study of "the relevant disciplines" (though it was never clear how they were to be integrated in the classroom). Peters-trained philosophers were sent out like missionaries to the benighted colleges to spread the word as they had been taught.

There is no disguising the fact that Peters, intentionally or not, kept a strong grip on the discipline of philosophy of education. His squat and often alarmingly silent figure, inscrutably puffing his pipe, was the *éminence grise* at almost all important educational philosophy gatherings in the 60s and 70s, and only the very persistent could maintain public opposition to his general conception of things for long. His control over the development of the discipline was reinforced by his editorship of the "house" journal and in other institutional ways. His retirement (coinciding admittedly with economic contraction) has left it disoriented and demoralized, as its leading figures cast about for new sources of inspiration.

Peters's influence on the philosophy of education is still felt today, both in the UK and in Australasia and North America. But it is waning, as it was bound to do. Of contributors to this *Festschrift* once closely associated with Peters, even Paul Hirst, Peters's "right-hand man", is a little critical of him, as he briskly surveys his published views on philosophy and the concept of education. Robert Dearden, who concentrates on the work on teacher training, is even more so, but both these thinkers are still disciples at bottom. Only John and Pat White, both former pupils, seem to be casting about seriously for new sources of inspiration, and looking in the direction of Alasdair MacIntyre.

Of the other contributors, only Anthony O'Hear actually *defends* a Peters-type liberalism (as a bastion against the assaults of Hayek), though the Harvard based Israel Scheffler provides a "reconstructional" analysis of the idea of human potential which seems to hark back to the conceptual analysis of Peters's early days. Otherwise, Michael Bonnett resolutely sets his face once more in the direction of Heidegger (on authenticity), and Mary Warnock once more firmly eschews the "Petrine" approach to philosophy of education, writing in a straightforward, commonsensical way as befits the ex-headmistress.

The most interesting of the papers is "Richard Peters: a philosopher in the older style", by R. K. Elliott. Elliott undoubtedly exercised a wholesome influence on Peters, helping him to move towards a more open and less dogmatic position in his later work. In this brilliant essay he convincingly and sensitively relates the great strengths and weaknesses of Peters's thinking to his personal style and cast of mind. He is revealed as a latter-day Stoic, who distrusted emotion but passionately believed in the power of the "formal intellectual tradition". Peters saw himself as an analytic philosopher; Elliott argues that "his work is most memorable and most stimulating in so far as he philosophizes according to the layman's conception of philosophy", which sees it as a guide to life, and that Peters used the analytic method predominantly "to support positions he had adopted on other grounds".

The editor provides the essential biographical facts in his introduction, and there is also a useful bibliography.

Francis Dunlop

Dr Dunlop is visiting fellow in education at the University of East Anglia.

Idealist lectures

Lectures on the Principles of Political Obligation
by T. H. Green
edited by Paul Harris and John Morrow
Cambridge University Press, £27.50 and £9.95
ISBN 0 521 26035 3 and 27810 4

T. H. Green was the most influential philosopher in Britain from approximately 1870 up to the 1920s. He died at the age of 45 in 1882 with very little published. His major works *The Prolegomena to Ethics* and the *Lectures on the Principles of Political Obligation* were published after his death, as well as the collected works edited by R. L. Nettleship. He had been a fellow at Balliol College, Oxford from the 1860s under the somewhat eccentric reign of Benjamin Jowett and in the last four years of his life he was they Whyte Professor Of Moral Philosophy at Oxford.

Fashions exist in philosophy as anywhere else. It is only by looking at the innovatory designer, who through force of personality and novelty catches the attention of the young minds, that we can really understand how an orthodoxy is engendered. Green in this sense was like Wittgenstein in the 1940s, his philosophical position being enthusiastically adopted and explored by a generation of philosophers. The school of philosophy which dominated from the 1870s was Idealism. Its emphasis varied between Absolute and Personal Idealism. The key protagonists were F. H. Bradley, Bernard Bosanquet, Sir Henry Jones, Edward Caird, J. H. Muirhead, William Wallace and Pringle Pattison among many others. Apart from some contemporary devotees many of the works of these philosophers gather dust on library shelves or in second-hand book shops – although interest is slowly reviving.

Green's own work is still subject to considerable debate. He seems to have embodied ideas from Aristotle, Kant, Fichte, Hegel, as well as the anglicized Platonism of Coleridge and F. D. Maurice. At times J. S. Mill's influence is also recognizable in his political philosophy. Apart from his work in philosophy Green was an active Liberal councillor in Oxford, a keen participant in the temperance movement, a governor of the Oxford High School and an active campaigner for the university extension movement. He was also one of the commissioners on the 1860s Royal Commission on Education.

This book is a very welcome addition to the growing body of literature on the British Idealists. It includes an edited reprint of the Longman edition of the *Lectures on the Principles of Political Obligation*, as well as the crucial lectures "Liberal Legislation and Freedom of Contract" and "On the Different Senses of 'Freedom' as Applied to Will and the Moral Progress of Man"; the latter lecture plus thoughtfully later in the volume. The editors also decided, with some justification, to include selections from Green's "Four lectures on the English Revolution" and *Prolegomena to Ethics*. The final items incorporated are some previously unpublished undergraduate essays and fragments on moral and political philosophy.

There has been a definite need for a carefully edited and readily available edition of Green's lectures on obligation without the somewhat dated preface and introduction by Bernard Bosanquet and A. D. Lindsay. The editors provide a concise and helpful introduction to some of the main themes in Green's thought as well as a sizeable body of notes for more detailed reference. They have also done a careful job comparing their edition with the original manuscripts. Presumably this will now become the major text for scholarly reference to Green, as well as a valuable sourcebook for students of political thought.

My major qualm is the inclusion of the undergraduate essays and fragments. There is certainly some novelty here and they are of interest to Green scholars, but how significant are they for the average reader? All selectivity is problematic, but my own choice would have been for some of Green's more mature and systematic writings. There is a marked absence of any of Green's theological writings – like the sermons "Faith", "The Witness of God" and "The Word is Nigh Thee". Alternatively some of his shorter philosophical essays on "Popular Philosophy" or "The Philosophy of Aristotle" would have been appropriate. The "Different Senses of Freedom", "Liberal Legislation" lectures and *Prolegomena* selections are excellent choices, but the "Four Lectures on the English Revolution" needed, in my estimation, a little more detailed explanation in the introduction. Without a fairly clear commentary these four lectures can appear rather strange to the unwary reader as they need to be fitted into Green's somewhat Hegelian view of history.

The important point in the present publication, however, is that it underlines the significance and relevance of Green as a political and moral philosopher. Once one is accustomed to Green's slightly ponderous language he is a thinker who repays intensive study. In many ways his writings form a counterpoint to J. S. Mill, making a refreshing change to the occasional acidity of Benthamism which mars Mill's work.

Andrew Vincent

Dr Vincent is lecturer in politics at University College, Cardiff.

Newsmagazine of the Islamic movement
Crescent INTERNATIONAL
Rapid change is afoot in the world of Islam. This is happening outside the normal range of politics and journalism; hence such 'surprises' as the Islamic Revolution.
Crescent International is the best informed newsmagazine of the Islamic movement. It probes deep into the fundamentalist soul of Muslims. It advocates, predicts, directs and explains change.
Academics are among contributors. Regular features include book reviews.
£16.50 in UK and Europe (US$30 rest of world) for 24 issues.
THE OPEN PRESS
8 ENDSLEIGH STREET
LONDON WC1H 0DS

BOOKS

A critic on the wane

Harold Bloom: the rhetoric of romantic vision
by David Fite
University of Massachusetts Press, £23.75
ISBN 0 87023 484 6

Professor Fite is a brave man. He has undertaken to unravel the theory and practice of a literary critic whose reputation for jargon, obscurity, self-contradiction, rhetorical evasions, and sheer rambling mumbo-jumbo, is unsurpassed.

Shot to notoriety by his brief polemic *The Anxiety of Influence* (1973), Harold Bloom has since exerted, appropriately enough, an anxious influence over the interpretation of Romantic and modern poetry, although there are signs, as Fite admits, that the vogue for his work may be waning. His latest books have gone relatively unchallenged and unnoticed; the "Yale School", of which he is a prominent member, seems finally to be deconstructing itself. Fite recognizes that "the anxiety of influence" may end up as one of the more perverse phenomena of the "me-decade", consigned to a "museum of gorgeous fads" alongside "pet rocks and Jimmy Carter".

But this is hardly central. What matters is Bloom's sustained assault on the orthodoxies of neoclassical modernist criticism, from T. S. Eliot to Brooks, Ransom, and Tate, and his attempt to forge a rhetoric that can put passion, will, and meaning back into our reading of poetry. To this end *The Anxiety of Influence* argues that "all 'strong' poetry since Milton has been written under a grim and increasingly oppressive psychology of belatedness which forces poetic sons to wrestle with the mighty dead of blocking precursors, so as to clear imaginative space for themselves". Every post-Enlightenment poem, in another memorable image, is like Oedipus meeting Laius at the crossroads.

Round this idea – variously drawn from Nietzsche, Freud, Vico, and Hebraic theology – Bloom has woven a bewildering mysticism, which is never quite the same from one book to another: whether this is opportunism, incoherence or a genuine and conscious development of previous positions is not clear. *The Anxiety of Influence* proposes six "revisionary ratios", strategies by which poets "wrestle with the mighty dead"; in a *A Map of Misreading* (1975), we are presented instead with three terms derived from the Lurianic Kabbalah, a strain which becomes even more elaborate in *Kabbalah and Criticism* (also 1975); in *Poetry and Repression* (1976) a more familiar Freudianism reasserts itself.

Bloom's earlier work is much more accessible to the non-initiate, and it may well remain his most durable. *The Visionary Company* (1961), for instance, is a remarkable treatment of high Romantic English poetry, which gives Shelley and Blake prominence over Coleridge and Byron; *Yeats* (1970) is a sustained rehabilitation of the Shelleyan elements of the early poetry and the Blakean elements of the later – relationships which are shown, without jargon, to embody the anxiety of influence, the burdens of inheritance, and the struggle to appropriate an original voice.

Bloom has also forcefully re-presented the tradition of American transcendentalism, casting Emerson as perpetrator of the "primal lie" of denying his "diminished belatedness" and proclaiming himself as the free and authentic voice of the "orphic sublime". In the poetry of Whitman, through Wallace Stevens to Ammons and Ashbery, this becomes a source of both strength and further defensive anxieties.

At the core of Fite's book are the theoretical texts mentioned above, in which Bloom finds his mature, or at least distinctive voice. Fite's unscrambling is calm and often very helpful, but one is still left with the feeling that it is simply not possible to elucidate fully an enterprise so full of "treacherous tautologies" as Bloom's. It is also a pity, I think, that Fite has so little to offer by way of explanation for Bloom's bizarre refusal to engage with the figure of Coleridge, whose poetry "suffers" from the shadow of Milton as conspicuously as that of Shelley and Blake.

Fite does, however, succeed in conveying the measure of the *power* of Bloom's writing, the way that it keeps poems alive. At its best, for all the hot air and pretension, Bloom's is a poetic Poetics: questing, suggestive, and haunting in its use of aphorism, incantation, and imagery. In his dramatic restatement of the problem of the autonomous creative imagination, he has magicked up Romantic modes in which to read Romantic and post-Romantic poetry, and offered an alluring alternative to the desiccations of formalism.

Rupert Christiansen

Rupert Christiansen is currently working on a study of Romantic biography.

James Strachey, a portrait by Duncan Grant (1910) from Frances Spalding's *British Art Since 1900* (Thames and Hudson, £10.50).

Poetic injustice

Shakespeare's Poetics
by Ekbert Faas
Cambridge University Press, £25.00
ISBN 0 521 30825 9

With only two hundred pages of text, this book offers more than fifty pages of notes and bibliography. Comprehensive enough, one might think, even for a Shakespearean study. But its omissions are significant. Remarkably, for a book which constantly claims originality for Shakespeare's ideas and practice, there is virtually no consideration of his predecessors, Lyly and Marlowe in particular, and no mention at all of those critics who have tried to define and describe what a poetics should be, such as Frye, Todorov, Jakobson, and Culler.

"Shakespeare's Anti-Essentialism" would have been a better title, because this is the real topic. But *poetics* is an attractive word, vague enough to include anything the critic wants. In this case he treats, *inter alia*, Shakespeare's use of the supernatural, silence in the sonnets, ideas about acting, art and nature in the late plays, and contemporaries' views of Shakespeare as the poet of nature. The whole is vaguely held together by the argument that Shakespeare shared, with Montaigne and Bacon, a scepticism about the prevailing neo-Platonism. His preference was for a kind of radical empiricism, an anti-essentialism which aimed at nothing higher than reproducing the purposeless flux of life. This is another contribution to "the comprehensive soul" view of Shakespeare. In short, as many have said before, he showed "an eclectic versatility in subscribing to whatever ideas best serve his immediate demands".

The few occasions on which Ekbert Faas addresses the poetry rather than the ideas show him to be a naive reader of it. When the poet in *Timon* says

Our pulpit is as a gum, which oozes
From whence 'tis nourish'd. The fire i' th' flint
Shows not till it be struck; our gentle flame
Provokes itself, and like the current flies
Each bound it chafes

it is confusing to see this described first as an example of form imitating content, the notion of a flowing poetic imagination being conveyed by a syntax which "constantly overwhelms the iambic pentameter line", and then to read that the effect is "further enhanced by the repeated middle pause". Pause after *nourish'd*, *struck*, and *itself*, as you must, and what you have are regular iambic lines, not in the least overwhelmed. A chapter on the poetics of silence in the sonnets closes triumphantly on the quotation of Sonnet 85 in full, with no further comment, and no apparent realization that for all of its claims to be the work of a "tongue-tied Muse" and "dumb thoughts", the sonnet is a model of articulacy. Then comes this attempt to describe synaesthetic effects in the lines "Dick the shepherd blows his nail" and "When roasted crabs hiss in the bowl": "we seem both to hear Dick's blowing and to feel the cold in his fingertips . . . we seem to smell, see, and hear the apples jump over the fire all in one instant". We certainly do.

The most disappointing part of the book comes at its very beginning, where the author tries to make out a case for Shakespeare's poetics being opposed in every way to Ben Jonson's. This involves a perverse emphasis upon Jonson's theory rather than his practice, and a perverser reliance upon a view of *Hamlet* which Ekbert Faas put forward in an earlier book, *Tragedy and After*. There *Hamlet* was given a "Nietzschean reading" which saw its hero as the rancorous man who infects all around him with his disease. Now a part of this disease turns out to be his stern insistence upon didactic drama, something which Shakespeare himself took care to avoid. In other words Hamlet is Ben Jonson's spokesman.

This is silly, and leads to some poor judgements. The marvellous anvil image in the 1623 poem on Shakespeare is dismissed as Jonson's "fitting his fellow-playwright into the Prokrustes bed of his own theories". The chief difference between the two dramatists is that "Jonson tries to isolate his auditor's ears as much as possible from their eyes" while Shakespeare's aim is the very opposite. Think of Ursula the pig woman or Doll Common tricked up as the Queen of the Fairies as examples of an auditory imagination. And then, remembering that *The Alchemist* opens with the sublime exchange "Believe 't, I will . . . Thy worst. I fart at thee", consider this remark: "so there is little to suggest that Shakespeare shared Hamlet's and Ben Jonson's puritanical distrust of anything spectacular in general and of the bawdy and obscene in particular". So much for country matters.

Gerald Hammond

Dr Hammond is senior lecturer in English literature at the University of Manchester.

A chronic mental disarray

The Letters of Robert Burns
volume one: 1780–1789
volume two: 1790–1796
edited by J. De Lancey Ferguson
second edition by G. Ross Roy
Clarendon Press: Oxford University Press, £45.00 per volume
ISBN 0 19 812478 3 and 812321 3

To store the minds of the lower classes with useful knowledge, is certainly of very great consequence, both to them as individuals, and to society at large. Giving them a turn for reading and reflection, is giving them a source of innocent and laudable amusement; and besides, raises them to a more dignified degree in the scale of rationality. This, written to Sir John Sinclair in 1791, is one of the least desirable of Robert Burns's multiple, epistolary voices. The aspiration to be, among other quite contrary things, a member of the moderate, sentimentous establishment never quite left him.

The bleak irony of this particular statement, of course, is that few careers bear such witness to the intense personal and creative suffering endured by a man of lowly social origins with an inherent genius for high literary culture. All too often viewed as an exclusively Scottish phenomenon, Burns, like Stephen Duck, Robert Bloomfield and John Clare, became mired in a no-man's-land between his poverty and the false pecuniary promises, sterile poetics and transient approval of his polite "betters".

If Burns did not descend to Clare's level of disintegration, these letters bear vivid witness to a chronic and mounting psychological disarray. As early as 1786 he could write that "even in the hour of social mirth my gaiety is the madness of an intoxicated criminal under the hands of the executioner." Towards the end, we sense a man as much trapped by language as master of it. The earlier rhetorical excesses of a Scotsman playing with English literary language (like that other remarkable Scottish peasant parodist Hogg he delighted in "bamms" and "flytings") had become the discrete voices of a radically displaced person.

Burns laid much of the blame for this decline at his own door. The letters trace a repetitive pain of excess followed by bouts of gloomy guilt. He both raged against and bewailed his lack of the virtue of prudence. He was, however, from the first marked out as a focal point for the harsh, mendacious social forces of the age. His early farm life did combine "the cheerless gloom of a hermit, with the unceasing toil of a galley-slave". His type of rented farm both in size and in the marginal quality of its land was a fiscal trap. His literary fame, partly due to his filling a sentimental, false stereotyped role of "peasant poet", yielded him neither proper patron nor commercial return.

Though the purity of his revolutionary aspirations was mixed with ambition and resentment, the failure of French-inspired republicanism did leave him feeling like "a Scorpion trapped under a thumb vial". The figure of the last days, a covert revolutionary who had attempted to send guns to France now decked out in militia uniform, is a peculiarly sad one. As he wrote in 1793:

> . . . here I sit, altogether Novemberish, a damn'd melange of Pretfulness & melancholy; not enough of the one to rouse me to passion nor of the other to repose me in torpor; my soul flouncing & fluttering round her tenement, like a wild Finch caught amid the horrors of winter & newly thrust into a cage.

Re-reading these letters not only demonstrates the extraordinary plasticity of language in Burns's hands, partly derived from the mutability of his personality, but also reveal them as key documents to the fraught world of the late 18th century. What an enormous pity it is, then, that all this new edition achieves is a minimal increase in textual accuracy. What we have in essence is De Lancey Ferguson's excellent 1931 edition combined with a new appendix giving the names of correspondents in letters in the poet's possession at the time of his death. This was printed in the *Burns Chronicle* of 1933.

Compared to his peers, Burns has still had nothing like his due attention. There have, however, been significant achievements in literary criticism and social history: one thinks of Crawford, Daiches, Strawhorn and, more recently, Weston and Simpson. One should surely expect that a scholar re-editing these letters would display an awareness of this both by writing a substantial introduction and creating a form of notation and reference appropriate to it. Professor G. Ross Roy reveals no such capacities. At £45 per volume, Oxford University Press has sadly resurrected one of the oldest Burns traditions: only the man himself did not make a profit out of his work.

Andrew Noble

Dr Noble is senior lecturer in English studies at the University of Strathclyde.

Announcing a new series of introductory critical guides . . .
THE AMERICAN NOVEL
Each volume contains:
★ a substantial introduction by a distinguished authority on the text, giving details of the novel's composition, publication history and contemporary reception
★ a group of new essays, each specially commissioned, which together constitute a forum of interpretative methods and prominent contemporary ideas on the text
★ a survey of the major critical trends and readings from first publication to the present
The first three titles:
New Essays on *The Great Gatsby*
Edited by MATTHEW J. BRUCCOLI
128pp. 0 521 26589 4 Hard covers £20.00 net
0 521 31963 3 Paperback £6.95 net
New Essays on Adventures of Huckleberry Finn
Edited by LOUIS J. BUDD
144pp. 0 521 26729 3 Hard covers £20.00 net
0 521 31836 X Paperback £6.95 net
New Essays on The Scarlet Letter
Edited by MICHAEL J. COLACURCIO
176pp. 0 521 26676 9 Hard covers £20.00 net
0 521 31998 6 Paperback £6.95 net
Cambridge University Press
The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU, England

BOOKS

Reality's mysterious roots

The Picture Book of Quantum Mechanics
by Siegmund Brandt and Hans Dieter Dahmen
Wiley, £26.50
ISBN 0 471 81776 7

Quantum Mechanics: a modern introduction
by Ashok Das and Adrian C. Melissinos
Gordon & Breach, $65.00 and $29.50
ISBN 2 88124 053 4 and 052 6

Quantum Physics: illusion or reality?
by Alastair Rae
Cambridge University Press, £17.50 and £5.50
ISBN 0 521 26023 X and 27802 3

Quantum mechanics lies at the heart of modern physics. It is a core subject for all undergraduates, yet it is notorious for its difficulty. In part, this derives from the highly counter-intuitive rules which the student must learn and in part from the subtle and even startling picture of reality that it demands. Indeed, 60 years after its inception there is still no consensus among professional physicists about what the theory means – if anything.

But it works! In fact it works so well that it is the best scientific theory in existence. In its more refined forms (such as the quantum theory of fields) agreement with experiment is accurate to a level of detail unequalled anywhere else in human inquiry. Now, with the rise of the laser and the microprocessor, quantum mechanics is penetrating areas such as engineering that reach into everyday life. Subtle and bizarre it may be, but quantum mechanics is becoming more and more relevant.

So people write books about it. They write two sorts of books. The first sort tells you how quantum mechanics works, what equations to use when, which systems display quantum effects, and so on. These form the stuff of undergraduate lectures. The other sort address the deeper problem of what we are to make of this immensely powerful and immensely baffling theory that seems to undermine common sense. As books in the former category are legion, it is gratifying to come across one that offers something completely different. Brandt and Dahmen achieve this with their unusual illustrated book.

The major stumbling block in the teaching of quantum mechanics is the lack of visual imagery. There is much talk of particles and waves but few attempts to represent them realistically. Indeed, one comes across only the odd diagram, usually highly schematic, of a wave function for some idealized system. Brandt and Dahmen, however, offer an impressive range of accurately plotted wave functions for many of the standard situations, such as one-dimensional scattering and tunnelling, spherical harmonics, and the harmonic oscillator. It is thrilling to see the waves wobbling about as they surmount obstacles and wrap around familiar potentials.

Sadly, books of this sort will be short-lived. They occupy an interregnum between the dry old texts which make heavy demands on physical insight and the forthcoming computer-generated all-colour video material which will leave nothing to the imagination. No static book can match a time-varying computer graphics display for intuitive appeal and student interest. Incidentally, the book is not all pictures. It also sets out the theory – and very nicely, because of the large page format.

In contrast, Das and Melissinos's traditional textbook covers most of the standard material for an undergraduate course, but makes extensive use of bra and ket notation, which might discourage less mathematical students. Das and Melissinos make up for their formal approach by a remarkable economy of presentation, so that the reader is not belaboured with gory proofs. This book would make a perfectly satisfactory course text.

Alastair Rae's book belongs to that other class of text seeking to clarify the conceptual basis of quantum mechanics. It is slim, lively, informal and immensely readable, taking the reader in a straightforward way through wave-particle duality, Heisenberg uncertainty, and interference and polarization experiments. An attractive feature is the easily accessible treatment of Bell's theorem, normally restricted to obscure formal texts, yet suddenly of intense interest because of a test recently carried out by Alain Aspect to probe the very essence of what is odd about quantum physics. That test revealed that either widely-separated elementary particles can conspire using faster-than-light signalling; or the common-sense picture of the physical universe existing all the while "out there" in a well-defined state, independent of our observations, is a fiction. Hence, the title of Rae's book.

Rae opts for a strongly anti-mystical stance, castigating those who would put "mind" at the centre of quantum reality. But he also eschews the weird many-universes interpretation, popular with some cosmologists. Refreshingly, if superficially, Rae hints at an unusual approach to solving the problems of the relationship between observer and observed. He treats the macroscopically *irreversible* nature of all quantum mensurements as paramount, something that is actually implicit in the writings of Niels Bohr – the father of quantum theory. Thus, he draws inspiration from Ilya Prigogine's work on non-equilibrium thermodynamics – particularly the distinction between object and process – or to use Prigogine's terminology, between "being" and "becoming". Rae even goes so far as to claim that events which leave no permanent record are illusions. Reality, then, is rooted in irreversibility. This is a challenging and provocative thesis, which I found very appealing. Unfortunately, its implications are not worked through in the book.

Still, nobody expects one of the most intractable problems of physical science to be tidied up in a book of this sort, and I can whole-heartedly recommend it to anyone puzzled by all that mystical quantum mumbo-jumbo that has become so fashionable of late and who wants a no-nonsense introduction to the mysteries of quantum reality that is as down to earth as the peculiar nature of the subject permits.

Paul Davies

Paul Davies is professor of theoretical physics at the University of Newcastle upon Tyne.

"Superbia", an engraving after Pieter Breughel, which is reproduced in Benjamin Goldberg's *The Mirror and Man* (University Press of Virginia, $20.00).

Learned empire

Science Reorganized: scientific societies in the eighteenth century
by James E. McClellan, III
Columbia University Press, $58.50
ISBN 0 231 05997 3

The rise and proliferation of scientific societies is one of the characteristic features of the period from the mid-17th century to the end of the 18th century. Within a hundred years of the foundation of the pioneering Royal Society of London and the Académie des Sciences in Paris in the 1660s, these had been imitated by scores of comparable groups, spanning Europe from Trondheim in the north to Palermo in the south, from Lisbon in the west to Gorlitz in the east. In addition, outliers were to be found as far afield as Batavia and Lexington, Kentucky.

Among such institutions, there was a considerable degree of variety. Most prominent were the academies of Berlin, St Petersburg and Stockholm, which acted as national centres of scientific activity and clearing-houses for scientific data. But there were also local groupings, which are in some ways more revealing of the Enlightenment's high valuation of science. Societies devoted to natural philosophy either on its own or in conjunction with other learned activities proliferated most of all in France, where they were to be found even in quite small towns like Cherbourg or Pau. Indeed, this aspect of 18th-century French culture was the subject of Daniel Roche's seminal study *Le Siècle des Lumières en Provence* (1978).

Roche's is not the only classic work in this field: others include Roger Hahn's excellent account of the Parisian Académie des Sciences – *The Anatomy of a Scientific Institution: the Paris Academy of Sciences, 1666–1803* (University of California Press, 1971; a paperback edition will be published later this year). But a synthesis attempting to do justice to the phenomenon of scientific organization in this period as a whole has long been needed. This is provided by *Science Reorganized*, the bulk of which is based on secondary sources dealing either with individual institutions or the institutions of particular countries. McClellan uses those sources quite conscientiously to build up an account of the societies during the 18th century.

McClellan offers a broad view of the growth of scientific societies and their vitality, revealing the late 18th century as the greatest period of expansion after an earlier stage of consolidation. He also attempts a typology of societies and their contexts, although this leaves a number of loose ends – for instance, on the rather ambivalent relations that apparently existed in different places between scientific societies and the universities. For whereas in cities like Bologna or Edinburgh, scientific societies seem to have been formed as adjuncts to the universities, elsewhere – in the Netherlands, for example – universities are here presented as antithetic to the establishment of such groups.

If this first part of the book is mainly synthetic, McClellan shows more evidence of original research in the later chapters, which deal with the way in which the societies interacted with one another, establishing a kind of international scientific network transcending national boundaries. He illustrates how societies provided a system of international communication through the exchange of letters and journals. Indeed, particularly in the mid and late 18th century, a series of cooperative scientific projects was undertaken, the most notable of which were the observation of the transits of Venus (that in 1769 was watched simultaneously in 77 places, mostly through the initiative of different societies) and the collection of data on the weather under the auspices of the Meteorological Society of Mannheim.

More hesitantly, McClellan also indicates how overlapping membership of the societies tended to define an elite of scientists. Moreover, the criteria used in elections also contributed to the demarcation of competent practitioners of science in a manner that can be seen as a symptom of incipient professionalization. McClellan ends with a view of how increasing specialization altered matters in the 19th century.

There are some surprising lacunae in coverage. For instance, concerning the Royal Society of London – one of the most seminal institutions studied – McClellan seems almost wilfully ignorant of recent work on the society's early years and its implications, relying instead on painfully dated secondary works. In addition, the more original chapters sometimes fail to go as deeply into the topics with which they deal as one might have hoped, so that the analysis tends to remain at a general and consequently sometimes bland level. But in giving an accessible and wide-ranging introduction to a significant aspect of the institutionalization of science in western culture, McClellan's workman-like book is sure to be appreciated.

Michael Hunter

Michael Hunter is reader in history at Birkbeck College, London.

Micro context

Microcomputers in Engineering and Science
by J. Flynto Craine and Graham R. Martin
Addison-Wesley, £13.95
ISBN 0 201 14217 1

The low cost, ready availability, ruggedness and power of modern microcomputers have ensured that the traditional view of "clean room number-crunchers" now describes only a tiny proportion of the applications of these machines. Potentially useful in almost all repetitive tasks from the machine shop to chemical process control, the increase in their sophistication has been a major factor in the development of industrial robots and is implicit in current progress towards robots with tactile and visual sensors. In the analytical laboratory, too, many instruments are now under microcomputer control, with laboratory samplers, reagent mixers and sequencers all being automated.

The ubiquity of microcomputers means that most further and higher education establishments now offer some sort of course in the topic for all those engaged in science and engineering. Successful development of new processes, plant, instrumentation and control requires cooperation between multidisciplinary teams who should have an appreciation of the potential in such a broad field of endeavour. Thus, although specialist courses are still essential, we need experts with broad horizons capable of seeing links.

The increasing use of the personal computer has also given us a new generation of young, gifted programmers whose talents need to be coupled with the real industrial and scientific world. However, although there is a plethora of books concerned with principles of microprocessors, assembly languages and high-level language programming, graphics and games, few books have sought to put the microcomputer in context for the engineer or scientist. Aimed at students studying any science, engineering or technology course at university or polytechnic, or practising engineers and even at the computer hobbyist, Craine and Martin's book attempts to do just that.

A rather unremarkable first chapter provides a general account of integrated circuits, microcomputers and some applications. Although this offers useful background for the complete novice, it adds little in content or approach to the current literature. Chapter two deals with the processing of information through descriptions of two high-level languages: Basic and Pascal. Though concise, these descriptions do not bring out the contrast between these languages. Interpreted and compiled languages, and issues concerning process structure, documentation and integrity, are not dealt with.

Chapter three provides a concise and well-written account of assembly language programming concepts, special reference being made to the 6809 microprocessor because of its regular instruction set. Similarities to and differences from other microprocessors are highlighted in a useful comparative section on data handling. Also, the use of high-level language structures as starting points for assembly language procedures provides a good model for real program development.

In the application of microcomputers to science and engineering one of the most important considerations, apart from the overall system and software specification, is the interface to the physical world. It is encouraging to see the emphasis placed on this aspect by Craine and Martin, with three chapters devoted to fundamental forms of input/output techniques, and to digital and analogue interfacing.

The chapter on transducers, sensors and actuators can of course only provide a smattering of commonly used techniques; and the treatment repeats that found in other texts. Furthermore, like many in the field, the authors treat these components as to some extent divorced from the overall system. There is no manifest appreciation of the trend towards "smart sensors", nor of the integration of microcomputers into sensors themselves to enhance performance and ease interfacing at the systems level. On the other hand, chapters eight and nine, on system design and development, show a good appreciation of current trends, the sections on intermachine communication, standards and local area networks being especially valuable.

This book should provide a broad appreciation of a fast-moving field. However, although the approach adopted is practical, there is a distinct lack of real examples. Also, the authors' goals are too diffuse: the book attempts to be all things to all people but falls through lack of depth. And the chapters on interfacing are of mixed quality and do little to illustrate the interaction possible between process, sensor, microcomputer and actuator. Despite this, the book should serve as useful course material for non-specialist students on both undergraduate and graduate courses.

M. A. Browne

M. A. Browne is lecturer in instrumentation at the University of Manchester Institute of Science and Technology.

A second edition of R. L. Havill and A. K. Walton's *Elements of Electronics for Physical Scientists* has been published by Macmillan at £29.50 and £11.95.

BOOKS

Al Capone states

Stalin and the European Communists
by Paolo Spriano
translated by Jon Rothschild
Verso/NLB, £16.95
ISBN 0 86091 103 9

The Soviet Union and Central Europe in the Post-War Era: a study in precarious security
by Kristian Gerner
Gower, £16.50
ISBN 0 566 00806 8

In a rather superficial way these two books complement each other. They are both concerned with the incubus of Stalinism and the *glacis* it created. Spriano details its historical and psychological congelation, particularly in France and Italy, in the period up to 1947. Gerner examines the fraught consequences of the political glaciation of Eastern Europe since that time. In method and message however it is difficult to imagine two more polarized approaches. Spriano is a wry, meticulous historian and an unselfconscious master of his craft. Gerner, by contrast, lays painfully bare his eclectic methodological starting-points and invites us to follow him on his subjective excursus through sources selected to demonstrate a point.

Spriano's book is in every way impressive. It is limpid and uncluttered in narrative line conveyed in a nicely understated sardonic style. That it is such a pleasure to read must owe a good deal to the translator Jon Rothschild. Spriano writes with the ease and polish of a man who is thoroughly at home with his sources having already established himself as the authoritative historian of the Italian Communist Party. And it is his sources, the written and checkable conventional sources of press and conference reports, memoirs and party resolutions, that he largely relies upon to tell his sobering tale.

Spriano graphically reconstructs the very different contexts in which the European communist parties had their being, striving with one part of their selves to articulate their particularity yet fatally locked into Soviet hegemony through their own consciousness of impotence. They were prisoners of their own self-imposed guilt at having failed to play the role that history had allotted to them. They were the bit-part actors who had ruined the promising production by forgetting their lines and they were never allowed to forget their incompetence. So long as Stalin lived he treated them with the disdain which, deep down, they considered no more than their proper desert.

And yet, as Spriano recounts, there were times and places where the old hope of winning the masses, of genuinely fusing themselves with the national spirit was rekindled, but each time a perverse dialectic reasserted itself. Popular esteem was won by, and in its turn demanded, appeals to national specifics, limitations on cringing subalternity and dreams of pride restored in independence. And each time that such a trend asserted itself it did so only for the duration of its utility to larger Soviet policy goals. The Machiavellian cynicism of Stalin's abrupt policy changes – from popular anti-fascist front to Nazi-Soviet Pact, from resistance and great patriotic war to national roads to socialism and back again to the sacred egoism of the Soviet state and its genius leader – all this is familiar enough but no one has chronicled its European impact as meticulously and dispassionately as Spriano.

Gerner's thesis too has been rehearsed many times before. It is that Soviet-style socialism as imposed upon the countries of Eastern Europe is an alien and basically Stalinist structure of ideas and institutions that can never be reconciled with their native democratic and pluralist traditions. These "Al Capone states" (as Gerner sylecthem) exist purely on Soviet sufferance. Their legitimacy derives from the confidence the Kremlin reposes in them rather then from that of their people The central paradox that Gerner pursues is that this Soviet empire, created to guarantee the security of the Soviet Union, suffers an endemic legitimation crisis that is incapable of resolution within the existing relations of Soviet domination and national subordination. The Stalinist command economy of these countries and the equally Stalinist prohibition of the free articulation and aggregation of interests, brings neither economic well-being nor national dignity (the two legitimating compensations that Gerner believes to be potentially available). The consequence is that the state system erected for the strategic protection of the Soviet Union is fragile and fraught with explosive social and political tensions.

There is evidence a-plenty, one would have thought, to support such a case. But at this point Gerner confronts us with the basic problem of what is to count as evidence. His is a restless up to the moment mind that will not rest content with the limitations of the sort of evidence that Spriano so adroitly marshalls. For someone whose "approach is hermeneutic" and whose "kind of hermeneutics is semiotic" and, moreover, whose "hermeneutic approach is structural" the matter of what shall count as evidence and what it signifies is obviously not so simply settled. "Before entering the analysis . . . it is necessary to state the general epistemological and theoretical background of the study, its methodological principles and the criteria for the choice of source materials." All of which is entirely laudable but does carry a fairly high risk loading.

Having exerted ourselves to follow our guide through the complex toils of locating the nature of the evidences that are to signify, we naturally build up expectations that the substantive analysis will be at a comparable level of sophistication and complexity. Alas it is not. The often simplistic historical narrative of succeeding chapters is an odd foil indeed to the agonized self-consciousness of the first. At a more mundane level there is little attempt made to reconstruct the common political culture that is made to stand in such dramatic contrast to imposed Stalinist norms and practices. We are told that "In Central Europe there were, when communism arrived, age-old traditions of pluralism, compromising and rational decision-making" so conspicuously absent from the Russian and Marxist traditions. There might be a case here, but the evidence as presented hardly compels us to believe that the distinction was quite so black and white. As a comparativist account of the postwar misfortunes of Czechoslovakia and Poland the book is sound enough and often illuminating but the awkward case of Hungary, through explored in one chapter, is never convincingly integrated into the general analysis.

In this particular clash of approaches to the telling of history, it must be said that Gerner, in contrast to Spriano, promises more than he is able to deliver.

Neil Harding

Neil Harding is senior lecturer in the department of political theory and government at University College, Swansea.

Italian communists at a meeting in Moscow, 1935

Empire building

Imperialism and After: continuities and discontinuities
edited by Wolfgang J. Mommsen and Jürgen Osterhammel
Allen & Unwin, £19.95
ISBN 0 04 909018 6

David Fieldhouse in a recent article highlighted the almost impossible task confronting the scholar who aspires to be a "compleat imperial historian" (not to mention a "compleat student of imperialism"), so extensive have imperialist studies become. Understandably the contributors to *Imperialism and After* lay no claims to comprehensive coverage, and they are fully aware of the terminological perils which attend their subject. But where Sir Keith Hancock in the 1940s suggested that imperialism had become too emotive a word for scholars to use, Wolfgang Mommsen replies in his preface that historians cannot ignore the term if they wish to participate in the on-going debate.

Historians predominate in this volume, with most of the contributors coming from British or German universities. There are no spokesmen from the third world despite the ever-increasing emphasis upon the need to study the "periphery" if imperialism is to be properly understood. Asia (excluding the Middle East) is the region to receive the most attention: Latin America the least. Some chapters are welcome up-to-date surveys of specific issues such as Dieter Brötel's analysis of imperialist domination in Vietnam and Cambodia and B. R. Tomlinson's study of British multinational corporations in India between 1920 and 1970. Other chapters are paired, the second offering a critique of the first.

Thus we have Ian Nish's thoughts on Japanese expansion in response to Bernd Martin's thesis that the *zaibatsu*, or big business groups, and not the Japanese military were the true masterminders of Japan from 1938. Nish modestly interjects that he is content to serve up "the rather fuddy-duddy view that Japanese imperialism was based on military initiatives and actions". As argued in this volume he has the advantage in that Martin only establishes the continuing influence, hardly the dominance of the *zaibatsu*. Nor does Martin substantiate an earlier remark that Manchuria (1931) "presaged a military showdown with the West", the choice of the road to the Tripartite Pact of September 1940 and Pearl Harbor in December 1941 surely being by no means inevitable until the spectacular German victories in France and the emergence of the United States from isolation.

Central to this collection is Ronald Robinson's essay, "The Eccentric Idea of Imperialism, with or without Empire", a contribution which frequently attracts comment elsewhere in the book. Robinson has no time for those who insist on a straight continuation of imperialism from colonial times. Even for the classical era he stresses the importance of a bargaining and part cooperative relationship, however unequal, between the colonizing and the colonized elites. With independence the balance, though still unequal, has changed significantly, if to varying degrees according to the peoples concerned. In general, there are more forces, both internal and external, working to the advantage of the weaker party than in the late 19th century. Contemporary "informal imperialism" also tends to be relatively expensive in comparison with earlier periods. These are only some of the points articulated in a sophisticated and broadly persuasive assessment of the recent past.

Several writers on the United States join forces against William Appleman Williams and his disciples (one of the unrepresented schools of thought). While the latter carried their case against American capitalism too far, economic influences on American foreign policy cannot be dismissed quite so firmly as they are by Tony Smith. When he in effect asks, where is the evidence for American economic interest in Southeast Asia, one can point to National Security Council and State Department papers from 1949 which include western economic interests in general among the justifications offered for intervention in that region. These statements may not be conclusive in themselves, but they deserve further study.

Meanwhile, even as these essays were being prepared, American policy in Central America and Soviet reactions to challenges from Islam were providing new questions for the student of (dare one say it?) imperialism to ponder. Deep resentment persists in what Anthony Brewer describes as "this profoundly unequal world system" – so unequal in his view that he is impatient with debates over terminology. If OPEC was formidable in the 1970s, this did not mean that economic exploitation was not occurring elsewhere. The value of this book lies not only in its contents but in its reminders of how much more has to be re-examined or studied seriously for the first time.

C. J. Bartlett

C. J. Bartlett is professor of modern history at the University of Dundee.

Almighty dollars

Economic Security and the Origins of the Cold War, 1945–1950
by Robert A. Pollard
Columbia University Press, $32.50
ISBN 0 231 05830 6

"We are the first empire of the world to establish our sway without legions", wrote the American theologian Reinhold Niebuhr in 1930. "Our legions are dollars." And, he might have added, "our dollars are legion", for by the 30s the USA was the world's principal exporter and its main source of new investment.

This theme of US economic imperialism became the centrepiece of so-called "revisionist" accounts of the cold war. "Orthodox" US apologists and historians presented the United States as simply responding to Russian expansionism, selflessly aiding free peoples under threat. Since the 1960s "revisionist" scholars, by contrast, have tended to "blame" the USA for the bipolar confrontation, arguing that it tried to create an economic order accessible to US goods and capital.

This "open door" interpretation, associated particularly with William Appleman Williams, remains influential, but in recent years a "post-revisionist school" has developed around the work of John Gaddis. Derided by some revisionists as merely an "orthodox retread", this approach seeks a middle ground, depicting the cold war as the product more of muddle than machiavel.

Robert Pollard, in this revision of his doctoral dissertation, is a self-confessed post-revisionist. He admits the economic roots of much US foreign policy in the 1940s but argues, with orthodoxy, that self-interest and altruism conjoined – that what was good for General Motors was not only good for America but good for the world. He also emphasizes that this concern for "economic security" pre-dates the cold war and was not the cause but the instrument of "containment".

Pollard seems to use "economic security" in three main ways. Most fundamental, it stands for the idea that peace depends on prosperity, that "nations which act as enemies in the marketplace cannot long be friends at the council table", to quote Will Clayton of the State Department in 1945. This was the apparent lesson of the 1930s, with its aggressive economic nationalism, and US postwar planning identified as fundamental objectives the reduction of trade barriers and the promotion of international commerce. This was the philosophy behind US efforts to create the International Monetary Fund.

But hopes of a new world economic order were soon dashed. European reconstruction proved harder than expected and by 1947 Russia was perceived not as a truculent ex-ally but as a potential foe. However, this did not mean military confrontation, Pollard stresses. Washington feared communists gaining power in western Europe not the Red Army rolling across Germany. The US therefore provided economic aid to help Europe recover and resist the appeal of communism. The Marshall Plan marked the apogee of economic containment – security by economic means.

"Economic security" also had a domestic dimension. In detail Pollard demonstrates the pre-Keynesian mentality of the Truman Administration and especially of the President himself. Although resorting to increasingly strident anti-communist rhetoric to push aid programmes through the Republican Congress, Truman refused to rearm. Faced with inflation from 1946 and recession from mid-1949 he kept a tight rein on the defence budget, insisting that the economy could not afford the military's ever-lengthening shopping list. It was only with the Korean War from June 1950 that the Pentagon gained full approval for its policy of military rather than economic containment.

Pollard's arguments are often familiar. Gaddis, Alfred Eckes, John Gimbel and Warner Schilling are among those who have pointed in the same directions. This is also a US-centred book. Pollard makes no mention, for example, of Lord Bullock's work on Bevin or Alan Milward's iconoclastic argument about the limited impact of the Marshall Plan on the economies of Western Europe. Even on the US side we have to remember that economic containment was always implemented under the umbrella of US "air-atomic" supremacy.

Nevertheless, this is a valuable synthesis and development of recent scholarship. There are concise yet penetrating summaries of decisive events such as the Truman Doctrine and the Marshall Plan, and the book extends beyond Europe with helpful chapters on Asia and on raw materials. Pollard has given us a clear, well-researched and sympathetic overview of US foreign economic policy after the Second World War, as America assumed its often hesitant hegemony.

David Reynolds

David Reynolds is director of studies in history at Christ's College, Cambridge.

The Case for Animal Experimentation

An Evolutionary and Ethical Perspective

MICHAEL ALLEN FOX

A timely and provocative book, *The Case for Animal Experimentation* is the first full-length examination and defence of animal experimentation by a philosopher. Drawing on a wide range of philosophical and scientific material it will be invaluable in unravelling this emotional issue.

£15.95 Hardback 278pp 0-520-05501-2

Essays on Descartes' Meditations

EDITED BY AMÉILE OKSENBERG RORTY

The essays in this volume form a commentary on Descartes' *Meditations*. Following the sequence of the meditational stages, the authors analyse the function of each in transforming the reader, to make him realise his essential nature as a rational inquirer, capable of scientific, demonstrable knowledge of the world.

Major Thinkers Series, Volume 4

£41.25 Hardback 543pp 0-520-05496-2; £14.50 Paper 0-520-05509-8

UNIVERSITY OF California PRESS

126 Buckingham Palace Road · London SW1W 9SD

BOOKS

LAW

Legal dogmatics

Walker and Walker: The English Legal System, sixth edition
by R. J. Walker
Butterworths, £28.00 and £16.95
ISBN 0 406 67760 3 and 67761 1

Introduction to English Law, eleventh edition
by Philip S. James
Butterworths, £14.50 and £9.95
ISBN 0 406 60501 7 and 60502 5

The conventions underpinning the compilation of the legal textbook are frequently somewhat obscure. Despite the inordinate importance of the textbook, both as a practical source of legal knowledge and also as the only available systematic commentary upon the substantive legal disciplines, the rules governing the genre remain tacit and unwritten. It is in such a fashion that the legal textbook frequently contrives to assume an authoritative or monumental status within legal education. It does so by ignoring the interdisciplinary dimensions of legal studies and by privileging a tradition of dogmatics over that of criticism. In slightly differing degrees, both of the works under review fall into the expository tradition of the modern legal textbook, both seeking to provide pedagogically directed introductions to the doctrine and study of the English legal system.

R. J. Walker's *The English Legal System* is now in its sixth edition and, updated and slightly extended, it is largely unchanged in its character as a major work of legal dogmatics. It provides a doctrinally agreed and purportedly comprehensive introduction to the sources, structure and bureaucracy of the English legal order. Its major strength lies in its coverage of legal procedure. The new edition contains a useful additional discussion of the rules relevant to the judicial review of administrative decisions, and interestingly annotates the procedural implications of the House of Lords judgment in *Council of Civil Service Unions v Minister for the Civil Service*. On the other hand it could plausibly be argued that the work remains trapped within an outmoded and increasingly insupportable model of legal studies conceived exclusively in terms of the study and citation of rules. In this aspect, the work may be viewed as incoherent with contemporary academic practice, and is further to be criticized for its refusal to contemplate or account for recent developments both in the theoretical and also the empirical study of legal regulation.

In so far as *Walker and Walker* is intended as something more than an admirably thorough representation of the self-image of the legal administration, it must aspire to scholarship. It is precisely in terms of the claims of scholarship that it is to be hoped that there is a rapidly diminishing number of introductory law courses that are still prepared to limit their method and syllabus to the curriculum tacitly espoused by *Walker and Walker*. It may be easily agreed, for example, that an introduction to the English legal system ought to include both historical and an analytical account of the sources of law together with an outline of the principal administrative institutions and hierarchies. It is somewhat harder to comprehend that an entirely interstitial and dogmatic presentation of these issues is sufficient to comprise a scholarly introduction to its subject-matter.

The historical sources of English law are simply tabulated. No attempt is made to elaborate the conceptual parameters of legal sources nor to explain the doctrinal development of the theory of legal order. The common law is rather presented as both conceptually and geographically insular while its development is tacitly explained in terms of the unbroken continuity of the rule of law. Similarly, the refusal to countenance other phenomena of social control and other disciplines of interpretation leads to a remarkably narrow account of legal method. In discussing the binding elements of precedent, for example, the reader is simply informed of the largely rhetorical distinctions between *ratio* and *obiter*, between the binding and the persuasive and is led to assume the factual rather than the symbolic quality of their reference.

The interpretation of legislation is also formulated in strictly positivistic terms. In the face of considerable linguistic evidence to the contrary, legislative interpretation is explained in terms of a fundamental "literal" approach wherein legal language somehow manages to achieve univocality. In the face of substantial philosophical argument to the contrary, the student is informed that the meaning of statutory provisions can be understood in terms of the "intention of Parliament" and that the more peripheral rules of interpretation and construction are justified by fidelity to the sovereign will.

Walker and Walker is to be criticized from an educational perspective for its failure to provoke or encourage critical reflection. While it is certainly an exemplary work of exegetical casuistry and a remarkable mine of information, it is open to jurisprudential criticism for its failure to accommodate the social and political contours and characteristics of the legal institution and its history. It is, in short, a party to what has recently been generically described as the "decline of juridical reason", the loss of the conceptual or properly hermeneutic bases of the legal treatise and institutional writings more generally.

Interestingly though misleadingly, James's *Introduction to English Law* claims to be a product of the historical tradition of legal texts. In other words, it takes Justinian's *Institutes* as its model of classificatory method and exposition. What it provides, however, is a synoptic catalogue of contemporary legal wisdom. The law of contract, for example, is presented in the classical terms of subjective agreement and is treated separately from the law of tort, which latter body of law is reduced to a list of independent nominate torts. It is unlikely that the great institutional writers, a Gaius or a Tribonian for example, would have rested content with such classifications.

Peter Goodrich

Dr Goodrich is lecturer in law at the University of Newcastle.

LAW BOOKS FROM CROOM HELM

Conciliation in Separation and Divorce
Lisa Parkinson
This book is the first British study of conciliation written by a pioneer in the field. A clear and authorative study of the development of conciliation.
£12.95 0-7099-4053-X pbk only

Gender, Sex and the Law
Edited by Susan Edwards
£7.95 pbk 0-7099-0967-5

The Development of British Immigration Law
Vaughan Bevan
£28.50 hbk 0-7099-0663-3

Police Powers and Accountability
J.L. Lambert
£16.95 hbk 0-7099-1660-4

Croom Helm Ltd, Provident House, Burrell Row, Beckenham, Kent, BR3 1AT
01-658 7813

(0923)

New Editions of two classic texts from Pitman Publishing Ltd.

Smith and Keenan's Company Law
6th edition Denis Keenan
The sixth edition of a well established and concise text.
- extensive coverage of the 1985 Companies Act
- details of the new Insolvency Act
- decisions on the Ultra-Vires Rule, retention clauses and minority protection
- a comprehensive appendix with explanatory headnotes.

Ideal for the professional examinations of Accountancy bodies, the Institute of Chartered Secretaries and Administrators, the Law Society and the Institute of Legal Executives.
May 1986/544pp/Paper/0 273 02487 6/ £10.95

Smith and Keenan's English Law
8th edition Denis Keenan
Completely updated to take account of the effects of major changes in recent legislation.
- features the provisions of the Administration of Justice Act 1985
- includes the Companies Act 1985
- the Criminal Trespass Act 1984
- new cases, particularly in the field of contract, tort, property, negotiable instruments and banking are also included.

Invaluable for A level, HNC/D and BTEC law courses, useful introductory text for more advanced courses.
February 1986/912pp/Paper/ 0 273 02342 X/£11.50

For further information, or for a copy of our Business and Professional Studies catalogue, please contact: The Publicity Department, Pitman Publishing Ltd, 128 Long Acre, London WC2E 9AN. Tel: 01-379 7383.

Pitman

Dire straits

The Decay of International Law? A reappraisal of the limits of legal imagination in international affairs
by Anthony Carty
Manchester University Press, £25.00
ISBN 0 7190 1850 1

Law, Force and Diplomacy at Sea
by Ken Booth
Allen & Unwin, £18.50 and £7.95
ISBN 004 34 341027 8 and 341028 6

One of these books is by an international politics don who to some extent believes in international law. The other is by an international law don who doesn't. Each of them has a more or less specialized readership in view (Carty, the more so) and what they have to say can be relied on to provoke fruitful though perhaps acrimonious specialized debate. But since much of what they say can be understood and valued in the wider world, a historian with a toehold in both camps may venture to explain, however crudely, what it is; their common concern being the universally intelligible one of promoting order and harmony among states, with an eye especially on the relevance and usefulness of law.

The nature of the body of law they have in view, international law, is the subject of endless argument. No one doubts that as a matter of fact it matters enormously in regulating the relations of states and of the people who, whether as individuals or in groups, inhabit them. Not only must the shipowner, the merchant banker and the millionaire divorcée use it. The poorest he and she among us may learn to bless it when mugged in Miami, defrauded in Dubai or pronounced a POW by the PLO. But what sort of law, after all, is this which one of its greatest exponents, a century ago, described as lying at "the vanishing point of jurisprudence"? What *quality* of law is this, whose content of right and justice is scarcely possible to discern or determine? And what sort of a system of law is it, that knows no sovereign and that can be broken by its subjects whenever they calculate that their interests would be better so served?

Dr Carty of Glasgow University devotes his intensely interesting and closely argued book to the investigation of such questions and comes up with answers that will take a lot of learning and hard work to rebut. The practical ad hoc utilities of the working parts of the international legal system, he knows about as well as anyone. But they are not what he is concerned about. Not himself, he modestly insists, a legal *philosopher*, he is a legal *theorist* with a conscience, a professional self-respect and a high and noble idea of law. Having moreover also a sacred thirst for unity and completeness, he has become tired of the self-delusions and introversions which, he argues, keep international lawyers from knowing as much about themselves and the limitations of their science (if it is a science) as they should.

Lawyers ought to take "reality" as their subject matter, and the realities of international relations are complicated, confused, ever-changing, and pretty rough; at their roughest, as understood by Hobbes (whom he often mentions); in their softer aspects as in the "anarchical society" of the late Hedley Bull (whom he doesn't).

A 15th-century court of law: a picture from *The Making of Britain: the middle ages* edited by Lesley M. Smith (Macmillan, £20.00 and £6.95).

Instead of which he finds "an esoteric academic literature" whose image of the world its manufacturers mistake for the real thing while they pull levers and argue cases as required of them by their employers, their naivety and their ideologies.

The mild depression of spirits induced by Dr Carty may be temporarily relieved by recourse to Dr Booth of Aberystwyth. His world emphatically is not a fantasy one. It is the world of Admiral Gorshkov and Dr Kissinger, of Polaris and pollution, and the usual alphabet soup of ABM, EEZ, SSBN etc. But most of all is it the world of the United Nations Convention on the Law of the Sea. Leaving legal theory out of doors, he sticks to practice, and the practice he writes about is that to be found in those not unperilous straits where meet two major streams of international law, the law of war and the law of the sea.

UNCLOS which after twenty years of preliminary labours became ready for signature in 1982 took the public fancy for many good reasons. It had to do with the division of world resources. From it came the famous phrase, "the common heritage of mankind". It was heavily concerned with environmental pollution and maritime scientific research. It seemed to sort out a variety of ticklish matters that increasingly brought sea-users into conflict with one another and with riparian states: territorial limits, passage through straits, economic zones and so on. What it did not seem to have had much to do with was the military uses of the sea. But, Dr Booth tells us, those were very much in the minds of the naval power participants and though they hardly figured in the text, they were never far from the surface. Now in this admirably lucid and readable book he offers an expert assessment of how those naval powers (above all of course the USA and the USSR) may be expected to relate to the new realities: the legal ones as reshaped by UNCLOS, along with those of more cultural, economic and political character.

There is no over-estimation of international law here. Like war, to acutely remarks, law is a continuation of politics by other means; and the law of the sea has always been so to a peculiar degree. All that international law at this level offers is bench-marks and guidelines registering the balance of power. The parts of it which the greater powers believe they can bear may be quite distinctly drawn; the parts they are dubious about will have to be left fuzzy, so that the dominant naval powers will be able to probe and push it towards their own advantage; as the USSR does with its submarines around Sweden and Norway, the USA with surface vessels in the Black Sea and the Gulf of Sirte.

Nothing here will surprise, thought the wealth of detail may delight any reader already acquainted with strategic studies. Not much is for anyone's comfort either. The relief offered by Dr Booth soon wears off. The eighties he expects to be "a grim period in international afairs . . . War and intervention seem to be back in season." His book is admirably calculated to forecast their maritime dimension and it may save us avoidable irritation at what, beneath pious references to both letter and spirit of UNCLOS, will contain large traces of ignorance, hot air and hypocrisy.

Geoffrey Best

Geoffrey Best is an academic visitor in the international relations department, London School of Economics.

BOOKS

LAW

Mapping changes

The Changing Constitution
edited by Jeffrey Jowell and Dawn Oliver
Clarendon Press: Oxford University Press, £25.00 and £12.95
ISBN 0 19 876176 7 and 876175 9

Law, Legitimacy and the Constitution: essays marking the centenary of Dicey's "Law of the Constitution"
edited by Patrick McAuslan and John F. McEldowney
Sweet & Maxwell, £18.50 and £11.50
ISBN 0 421 33120 8 and 33130 5

A. V. Dicey

A. V. Dicey was Vinerian Professor of English Law at the University of Oxford between 1882 and 1909. In 1885 he published *An Introduction to the Study of the Law of the Constitution*, an outstandingly successful exposition of the unwritten British Constitution of his day. The 1985 centenary of the appearance of this work, a work whose influence has persisted to this day, has provided the occasion for a review of the British Constitution in these two collections of essays.

The content of constitutional law in Britain has always been open-ended. In these two volumes of essays 23 well-known public lawyers and political scientists attempt, among other things, to chart some of the features of the British Constitution in the 1980s. The result is a constitutional law map which has changed as much since Dicey's day as the road network. Institutions and phenomena examined in some detail include parliamentary select committees and the role of the backbencher in the House of Commons, "quangos" and nationalized industries, local government, the police, the Comptroller and Auditor-General referenda, privatization and intra-party democracy. Other landmarks of the modern Constitution which Dicey would have found unfamiliar, such as tribunals, ombudsmen and public inquiries, are also considered, though in less depth, in some of the essays.

The transformation of the constitutional landscape since the late 19th century has not been matched by the evolution of constitutional law concepts. Until fairly recently public lawyers seemed chiefly interested in the much narrower subject of judicial control of administration. Dicey would not find too changed the current understanding as set out in some of these essays of the rule of law, of parliamentary sovereignty, or of constitutional conventions, especially that of ministerial responsibility. The constitution of the 1980s which emerges from the pages of the essays is one which lacks a sound basis of constitutional principle and has little cohesion, a point developed by Partingdon in his essay in McAuslan and McEldowney. The institutions of the constitution have grown up in a haphazard and uncoordinated fashion. One consequence is a lack of accountability and the effective control of state power, twin themes which run through most of the essays and form the subject matter of Birkinshaw's "Decision-making and its Control in the Administrative Process-An Overview" in McAuslan and McEldowney. Another recurring theme is the issue of public participation in government (for example see Marquand's essay on regional devolution in Jowell and Oliver).

What is the cause of this arrested development, or – as McAuslan and McEldowney prefer to see it – this crisis of "legitimacy"? In his contribution to their volume Prosser suggests that it is because the state still functions through the 19th-century structures so brilliantly described by Dicey. These accord ultimate power to a Parliament which cannot effectively restrain the executive or oversee the running of a welfare state. The reasons for Parliament's ineffectiveness are many, those discussed in the essays include the strengthening of party discipline in the House of Commons to a point where Burke's "independent Member" is virtually extinct, the expansion and diversification of state power, the discrepancy between the proportion of votes obtained in the country and the proportion of seats won in the House of Commons and the absence of any constitutional guarantees of civil and political rights. Though it is clear that there is a problem it is not clear where the solution lies. What the essays show is that the constitution needs further study – not from a narrow legal perspective, but, as many of the essays in these two collections attempt, from one which embraces all perspectives, social, political, legal and economic.

The McAuslan and McEldowney volume is intended preeminently as a book for students. Students will find the book edited by Jowell and Oliver equally useful and in some ways superior. *The Changing Constitution* is certainly better value for money. Also, each essay in Jowell and Oliver begins with a helpful summary of its contents and there is no blatant political bias. Unfortunately the thematic introductory essay by McAuslan and McEldowney in *Law, Legitimacy and the Constitution* reads more like a party political tract than a work of academic scholarship. However, this is not true of the whole of the book which, very appropriately, celebrates the Dicey centenary of publication with a review of *An Introduction to the Study of the Law of the Constitution* by McEldowney.

Rosemary Pattenden

Dr Pattenden is lecturer in law at the University of East Anglia.

Tales of tribunals

Dismissed: a study of unfair dismissal and the industrial tribunal system
by Linda Dickens, Michael Jones, Brian Weekes and Moira Hart
Blackwell, £25.00
ISBN 0 631 139257

There is no doubt that although the industrial tribunal is a recent phenomenon having been created by the Industrial Training Act 1964, it is undoubtedly *the* established agency for adjudicating upon employee grievances. Governments of all political persuasions have been happy to see the jurisdiction of these tribunals increased and extended. A recent manifestation of this was the Conservative Government's decision to allow cases alleging unreasonable exclusion or expulsion from a trade union to be heard by an industrial tribunal. The most substantial part of its caseload, however, concerns its jurisdiction over unfair dismissal complaints. As Dickens *et al* point out, unfair dismissal applications constituted 72.9 per cent of tribunal workload in England and Wales and 78 per cent in Scotland in 1983. Yet, as far as I know there has been no detailed and sustained account of this highly significant aspect of tribunal work.

This book is a product of research funded by the Leverhulme Trust, most of the fieldwork having been conducted in 1978. Its purpose is twofold. First, to assess "the extent to which the industrial tribunal system provides the accessible, informal, expert adjudication mechanism which was intended"; and, second, to evaluate "whether the intentions and expectations behind the statutory protection from unfair dismissal have been fulfilled". The authors admit that the book is written from a particular perspective. Much of it attempts to discover how the position of the individual dismissed worker has been improved through the existence of unfair dismissal laws. But the study does not completely ignore the position of the employer, and I found that even accounting for its employee perspective sufficient regard was paid to the interests of employers.

There is no doubt that the book contains a wealth of detail and information. Occasionally, however, one wishes that it might have been possible for the authors to have used more recent statistics. The research material is well synthesized and explained and each chapter ends with a useful summary of the authors' major conclusions. Some of these are predictable. Thus nobody can be surprised by the conclusion that "the typical tribunal applicant . . . is a male, manual worker, not in membership of a union, who has been dismissed after relatively short service by a small employer in the private sector". Other conclusions point up what the authors regard as the inadequacies of the present system, for example the exceedingly few cases where the final outcome is re-employment, and the difficulties the unrepresented applicant may experience in pursuing his case.

This latter point stems from the authors' view that the single most significant shortcoming in the whole system is its tendency towards legalism. The authors show particular concern that although the tribunal members are supposed to be equals the bens are legally qualified chairperson can exercise considerable influence over its lay members, that an appeal lies, ultimately, to judges sitting in the appeal courts who have insufficient grasp of industrial realities, and that the test the tribunals apply to assess the reasonableness of the employer's conduct "further reduces the applicant's chances of succeeding". Dickens *et al* believe that the fact the tribunals cannot substitute their own judgement for that of the employer's but, instead, have to consider whether the employer's actions are within the "range of reasonable responses" goes a long way to explain the poor success rate of applicants at the hearing stage – only 30.7 per cent of applications were upheld in 1982.

These conclusions lead the authors to argue, in perhaps the most controversial part of the book, that the industrial tribunal system should be scrapped and replaced by a system based on arbitration. It is the authors' views that such an alternative system would dispel the handicaps that unrepresented parties presently experience, would increase significantly the chances that the applicant might be re-employed and, of course, would keep the courts out. These are interesting arguments but how successful they will be in a climate of opinion which the authors admit has been to cut back on the opportunities a worker has to claim against unfair dismissal is a matter of opinion. It may also be naive to believe that such a system would prevent judicial interference. On the other hand, this book is undoubtedly a well-documented and thought-provoking account of the operation of British unfair dismissal laws. Even if one disagrees with its conclusions, it is still well worth reading.

Kenneth Miller

Kenneth Miller is lecturer in law at the University of Strathclyde.

Law Books from Oxford

The World of Science and the Rule of Law
John Ziman, Paul Sieghart, and John Humphrey
This important and timely new study surveys the performance of the 35 nations that signed the Helsinki Accords, in the context of the rights in the code which are especially important for scientists. It describes in detail where and when those rights have been observed or violated, and what scientists everywhere could do, individually and collectively, to promote their better observance in the future.
0 19 825516 6, (Published 6 March 1986) £19.50

An Introduction to Administrative Law
Peter Cane
This book has two main aims: to provide a clear and relatively short statement of the most important rules concerning judicial review of administrative activity; and to provide a wider framework for understanding those rules.
0 19 825494 9, Clarendon Press £22.50
0 19 825485 7, paperback £9.50
Clarendon Law Series

Essays on Kelsen
Edited by Richard Tur and William Twining
In this volume, leading scholars from several countries present and debate competing interpretations and evaluations of Kelsen's work as a whole and his ideas on law, logic, justice, and international relations.
0 19 825470 9, Clarendon Press £30.00

Constitutional Conventions
The Rules and Forms of Political Accountability
Geoffrey Marshall
'As ever, his work is characterized by a clarity of thought and expression which provides an object lesson to all who think about, write about, or take part in, politics.' *Public Law*
'the material is admirably chosen and rich in the details of constitutional and political life . . .' *Times Literary Supplement*
0 19 876202 X, Clarendon Press £8.95
Forthcoming Autumn 1986

The German Law of Torts
A Comparative Introduction
B. S. Markesinis
Focusing on the German law of torts, this book uses the comparative method, making frequent references to American, English, and French materials. The material, based on the author's extensive teaching of comparative law in the USA and Europe, gives the book its unique appeal to students approaching German and comparative law for the first time.
0 19 825631 4, Clarendon Press £55.00

A History of the Land Law
Second Edition
A. W. B. Simpson
A highly readable account of the historical development of the common law of landed property. In this revised edition, the original aim—to write a book which would make the doctrinal history intelligible to students—is unchanged, whilst work published since the first edition appeared in 1961 is fully taken into account.
0 19 825527 3, Clarendon Press £25.00
0 19 825535 6, paperback £12.50

International Law in a Divided World
Antonio Cassese
A general introduction to international law considered in a political and historical perspective. International legal issues are considered within their historical context, and throughout an effort is made to identify the ideological and political motivation underlying international legal rules and institutions.
0 19 876194 5, Clarendon Press £40.00
Forthcoming Autumn 1986

The Changing Constitution
Edited by Jeffrey Jowell and Dawn Oliver
A collection of essays on current problems in constitutional law. The contributors include such distinguished names as: Professor A. W. Bradley, Gavin Drewry, David Butler, and G. Marshall.
0 19 876176 7, Clarendon Press £25.00
0 19 876175 9, paperback £12.95

Maintenance after Divorce
John Eekelaar and Mavis Maclean
Locates the debate within the body of empirical knowledge which exists about the economic consequences of divorce and also attempts a critical analysis of the policy of law and post-divorce maintenance. The book thus offers the outlines of a radical new approach to the problem based on principles which should underscore future debates on the topic.
0 19 825530 8, Clarendon Press £19.50
0 19 825529 2, paperback £8.95

Oxford Journals

The Oxford Journal of Legal Studies
Edited by P. S. Atiyah
Published on behalf of the Faculty of Law in the University of Oxford, the *Oxford Journal of Legal Studies* is designed to encourage interest in all matters relating to law, with an emphasis on matters of theory and on broad issues arising from the relationship of law to other disciplines.
0143-6503 Subscriptions (Volume 6), UK £27.00, N. America US$55.00, Elsewhere £33.00

Oxford University Press

Legal Theory and Common Law
Edited by WILLIAM TWINING
These specially commissioned papers – produced on a wide variety of common-law fields in the light of recent developments in general theory – will contribute to the study of common law and provide insights into the relationship between the theory and practice of law
260 pages. **£22.50**
(0 631 14177 3)

Human Rights
From Rhetoric to Reality
Edited by TOM CAMPBELL, DAVID GOLDBERG, SHEILA McLEAN and TOM MULLEN
This book tackles in concrete contexts the problems which arise in turning the generalized ideas and aspirations of human rights into specific requirements which can be effectively applied, accurately monitored and protected by law
272 pages, **£27.50** hardback
(0 631 14361 0)
paperback **£9.95**
(0 631 14362 9)

The Administration of Justice
ROBIN C. A. WHITE
A modern and comprehensive introduction to the English legal system in which the author provides a coherent narrative account, taking an explicit 'law in action' perspective.
304 pages, hardback **£29.50**
(0 631 14306 8)
paperback **£12.50**
(0 631 14307 6)

Basil Blackwell
108 Cowley Road, Oxford OX4 1JF
Suite 1603, 432 Park Avenue South, New York NY 10016

BOOKS

LAW

In quest of inquests

Coroners' Inquiries: a guide to law and practice
by J. K. D. Burton, D. R. Chambers and P. S. Gill
Kluwer Law. £32.00
ISBN 0 903393 79 4

The law relating to coroners is currently receiving an unusual amount of attention. The scholarly *Jervis on Coroners* is soon to go into a new edition; Thurston's *Coronership* has already done so, in a much expanded form; reform of the system of coroners courts is becoming topical again. *Coroners' Inquiries* is designed to fulfil a need left in the growing literature, for a relatively non-technical introduction for non-lawyers and non-specialists. Yet the book is a curious mixture.

Over half the book is pure, undigested legal material: the Coroners Rules 1984, statutes and notes of cases. Little of this will make sense to the non-specialist – the case notes especially are elliptical and obscure. The book's strong point is its text, 122 pages of tolerably clear writing which should enable the non-specialist to make some sense of the area.

The book studiously avoids controversy. For example, the authors go minutely through the implications of the Helen Smith decision, requiring inquests on all bodies brought in from abroad, no matter how obvious the cause of death; but never for a moment do they suggest that the law needs reform. And except for the blunt note on page 45 that "controversial inquests . . . lie beyond the scope of this book" there is no reference to the increasing numbers of cases where a political element has entered into the arguments at the inquest, often leading to outspoken criticism both of and by the coroners. Presumably the authors have opinions on these topics, but their readers never get to hear them. The book is meant as a practical one, and the authors plainly do not think that they can be controversial and practical at the same time.

How well they have succeeded in producing a practical work rather depends on which class of readers they have in mind. Paradoxically, for a work aimed at non-specialists, those who will benefit from it the most will be coroners themselves. Written by three coroners – respectively the secretary, vice president and an ex-president of the Coroners Society – and intended to replace the society's old *Recommendations on Procedure*, it contains much that will help a fledgling coroner, particularly their suggestions on handling major disasters and their brief summary of the law of treasure trove. But the authors are not trying to be all-inclusive; at various points the book resembles nothing so much as a list of "1000 things we wish we'd known when we started as coroners". Those seeking a comprehensive treatment must look elsewhere.

For the practising lawyer, the book is a valuable one. For those unlikely to be put off by a mass of technicality, and fully capable of referring to larger works on points of detail, *Coroners' Inquiries* is a useful blend of materials on how a smoothly-run inquest should proceed. It should also be of use to those who have some contact with coroners courts but are not trained as lawyers – the police, the press, forensic pathologists.

The people who will know the least about the workings of the inquest are, of course, the family of the deceased. If they wish to take an active interest in the inquest, will they be helped by this book? On this point the book is at its weakest. It is not that it is overly technical; on the contrary, it would be hard to do much better with the material the authors have had to work with. Nor can it be said that it ignores the position of the family. Nevertheless the book is written from the perspective of coroners, and recognizes the difficulties they face, including "highly emotional relations" and others anxious to propound their held opinions . . . in an atmosphere of bitter contention". The book is probably expect from an inquest, or what they should best prepare to make of their day in court.

Most regrettable is the book's treatment of legal aid. At several points the authors assert (correctly but unhelpfully) that legal aid is not available to provide representation before the coroner; at page 126 (in a paragraph not indexed under "legal aid") we mention that it *is* available to help the family prepare for an inquest, though even then they give the erroneous impression that this will only be available to those who wish to pursue a claim after the death of the family's breadwinner.

But to blame the authors for this is perhaps a little unfair. There are many people who might need to know how to an inquest functions, and it would be hopeless to expect any one book to cater for them all. *Coroners' Inquiries* is a valuable addition to the literature in this area, and will find many grateful users.

Steven Hedley

Steven Hedley is fellow in law at Christ's College, Cambridge.

Protecting the public

Dangerous Offenders: the elusive target of justice
by Mark H. Moore, Susan R. Estrich, Daniel McGillis and William Spelman
Harvard University Press, £18.25
ISBN 0 674 19065 3

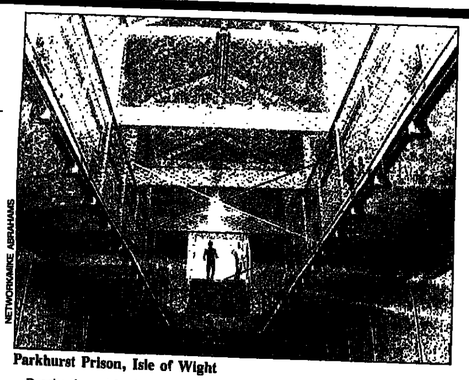


PHOTO: CHRIS ADSHEAD

Parkhurst Prison, Isle of Wight

The idea that the criminal justice system might address the problem of crime more effectively than it does by devoting extra effort to dangerous offenders has great attractions. It appears to focus on two related, though perhaps contradictory, concerns: public fear of crime and public concern over the costs of keeping people in prison. On this basis, it seems sensible to reserve limited prison space for those offenders who most deserve punishment and whose incapacitation would do the greatest good by reducing crime in the future. Not surprisingly, these common-sense notions have been embraced by those responsible for administering the criminal justice system. Though the authors concentrate on the United States, the picture has equal validity in Britain, where police, prosecutors and judges use their discretion against those deemed dangerous.

According to the authors, their concerns are to develop a framework for evaluating official responses to dangerousness with a view to guiding future policy; to identify the social values at stake; to examine whether it would be possible to be more discriminating in identifying dangerous people; and to bring out the central uncertainties involved.

They conclude that there should be special emphasis upon dangerous offenders at each stage of the criminal justice system and that this might reduce crime and lessen the debilitating sense of public danger which is generated by crimes of violence. In their view, the criminal justice system is actually biased in favour of dangerous offenders; they argue that their proposals may enhance justice as well as produce practical benefits.

The authors recognize two sets of problems in their approach: that it may not produce the hoped-for benefits; and that it might not avoid injustice to individuals. The benefits of reduced victimization, fear and sense of public danger are highly problematic because offending is not concentrated in a small identifiable group, because extended imprisonment does not necessarily control crime and because the system may already be operating selectively enough. The policy also risks injustice to individuals. Exposing some offenders to extra punishment on the basis of predictions of future conduct may be unjust, especially when the predictions, at best, are wrong as often as they are right. Moreover, our traditions of objectivity and restraint in confronting criminal offenders could be severely undermined.

Despite these risks the authors give the idea of selective incapacitation a qualified endorsement. They believe that it may reduce crime, allay fears and produce justice for offenders, victims and the general public. Their endorsement is qualified because the policy is dependent upon the spirit in which it is introduced, the concrete ways in which it is operationalized, and the provisions set down for gathering additional information to resolve uncertainties. They make far-reaching proposals to establish effective record-keeping systems and examine the effects of their policy on the detailed workings of police, prosecutors and judges.

Although the authors have made out a case for a policy of selective incapacitation and put forward *justifications* for punishing some offenders more severely than others, this is not the result of a complete analysis of the arguments or of new empirical data of a compelling character. Rather it is because they have actually set out to make a case and provide justifications and they have done so on the basis of existing information unassisted by any research of their own. They have not, or not successfully, addressed a number of central problems with the policy of selective incapacitation.

Those who advocate selective incapacitation often fall prey to concerns which are based upon restricted and socially-biased classes of harms. The authors do not escape this criticism. After discussion of the weaknesses of predictive methods, they conclude that an operational definition of dangerousness should focus upon individuals with two convictions for violent offences in three years of street (non-prison) time and two additional charges of the same character or two additional convictions for serious property crime. One problem with this is that it excludes without argument classes of offender, such as employers and manufacturers, and classes of conduct, such as tax fraud, from consideration as "dangerous". Moreover there is a distinct bias as between socially harmful consequences: drunken and reckless drivers, for example, are not considered dangerous although they may be a grave danger to others as well as to themselves. The use of charges introduces a highly controversial element that needs a justification that it does not receive here.

The definition advanced demonstrates another core weakness of selective incapacitation: its inability to specify or identify with accuracy the sub-population of dangerous offenders which is said to exist. The authors say that their definition may seem "too stringent to some and too inclusive to others" but its true weakness is that it is wholly uncertain. What, for example, constitutes a violent offence? A technical assault? A robbery in which force of a minor character (a "nudge" has been held to be enough in law) is used? The issue is wholly at large.

Advocates hope that the policy will be effective but bring no confidence evidence that similar efforts have reduced crime. Thus, prosecution career criminal units in the United States, focusing upon persistent offenders helped boost morale within the police and improved case-monitoring proceedings. But the units did not lead to increases in either conviction or imprisonment rates and had no discernible effect upon crime in the community.

Overall it appears that the authors have sought to justify selective incapacitation rather than to test whether it is appropriate, useful and desirable. Their own definition is vague, untested and socially-biased and does not adequately address their real concern: violent offences among strangers. It is not sensible to base a definition upon criminal records, which they acknowledge are unreliable because, for example, much crime is not solved. Advocating improvements to record-keeping misses the point that records are not faithful accounts of real events but social constructions. The authors fail to answer the fundamental jurisprudential question: are we ever justified in inflicting punishment more severe than the gravity of the offence warrants? Despite their efforts the authors have demonstrated that dangerous offenders are an elusive target of the criminal justice system.

Michael McConville

Dr McConville is senior lecturer in the faculty of law at the University of Birmingham.

FRANK CASS JOURNALS

TRUST LAW & PRACTICE
Ed: John Quarrell
Published six times a year
Annual subscription: £75.00

IMMIGRATION AND NATIONALITY LAW & PRACTICE
Ed: Lawrence Grant
Published four times a year
Annual subscription: £45.00

INSOLVENCY LAW & PRACTICE
Ed: Michael Griffiths
Published six times a year
Annual subscription: £60.00

PROFESSIONAL NEGLIGENCE
Eds: Keith Stanton and Tony Dugdale
Published six times a year
Annual subscription: £60.00

COMPUTER LAW & PRACTICE
Eds: Philippa Hughes, Jeremy Phillips and Andrew Trew
Published six times a year
Annual subscription: £60.00

ADVERTISING AND MARKETING LAW & PRACTICE
Ed: Richard Lawson
Published six times a year
Annual subscription: £60.00

MEDIA LAW & PRACTICE
Ed: David Goldberg
Published four times a year
Annual subscription: £45.00

LEGAL HISTORY
Ed: Albert Kiralfy
Published three times a year
Institution: £42.00 Individual: £26.00

For further information please contact:
FRANK CASS & CO LTD
11 Gainsborough Road, London E11 1RS
Tel: 01-530 4226 Telex: 897719 (0522)

HOW TO STUDY LAW

A new introductory book for students
PUBLISHED MAY 1986
PRICE: Hardback 9·50 Paperback 5·95

BOOKS

LAW

Deeds and needs

Taking Juvenile Justice Seriously
by Ruth M. Adler
Scottish Academic Press, £16.00
ISBN 0 7073 0466 0

A coherent philosophy towards children who break the law is probably the last thing we have been led to expect from government and court policies towards juvenile justice. They muddle along much as they have muddled along for over a century, see-sawing between the dual objectives of meeting children's needs and punishing wrongdoers – objectives which, we are continually assured, are complementary and not in any way contradictory.

In recent years people have written in strident terms about "justice for children", "the child's best interests", children's rights and even "the child's right to punishment". While English juvenile courts fill up with solicitors and barristers all eagerly defending their clients' interests in the ritual debate over fault and punishment, over the border in Scotland, parents and children together with their social workers sit round a table to discuss problems and progress with concerned members of juvenile panels. The first system, we are told, is called "justice" and the second, "welfare". Yet it is difficult to find anything very just about putting naughty working-class kids up before a bench of middle-class JPs and then telling them to keep quiet while police, lawyers, and social workers get on with the job of explaining to the magistrates what they did and what should now be done to them. Nor can sending children away far from their families to residential institutions deep in the Scottish countryside in order to "protect the community" reasonably be regarded as promoting the child's welfare.

Ruth Adler's book is refreshing in that it cuts through much of the rhetorical padding which surrounds juvenile justice. She asks tough questions about the real meaning of the terms "children's rights" and "children's interests" and their implications for policy and decision makers who are serious about translating these terms into practice. The result is a thoughtful and thought-provoking analysis, which not only exposes the hypocrisy of much of the present discourse on both sides of the border concerning children's needs and how to meet them, but which also points the way towards radical changes in legal and institutional responses towards children who break the law.

Although some of the theoretical discussion in the early chapters betrays its origins as a PhD thesis and is likely to be heavy-going for anyone who is not a devotee of jurisprudential theory, it is this attempt to find a firm theoretical base which enables Ruth Adler to provide insight and clarity in her subsequent examination of the haphazard way in which decisions concerning children are made. Take, for example, the widespread notion that courts are somehow failing in their duty if they decide not to punish children who commit offences. Adler points out that, unlike adult offenders, many children will already have been punished by their parents long before any judicial hearing. "It is surely not asking too much of officials," she comments "to explain in the relevant circumstances that no further action will be taken because the only action deemed appropriate (mainly punishment) has already been taken."

She is equally critical of the current view in the Department of Health and Social Security and elsewhere that family courts, when they arrive, should deal with non-criminal referrals, while all children accused of crimes should be consigned to the essentially punitive juvenile court. As she explains, "Once it is recognized that some children may be in need of care, it seems absurd that at least a number of these may come to the attention of the authorities through offending." She gives the example of a 10-year-old child abandoned by its parents who would be referred to a family court, while the same child, arrested for breaking school windows would be sent to the juvenile court and then, when the home circumstances had been revealed, perhaps transferred to the family court.

Ruth Adler's solution is for the great majority of youngsters who break the law to be dealt with by applying the ideals of welfare within a clear legal framework. The concentration on children's needs and interests should exclude, except so far as it is strictly relevant to these issues, any consideration of the child's deeds. In those few cases where punishment is thought to be the appropriate response, it should be stated quite openly from the outset that different criteria apply. A combination of openness and explicitness in the factual and value bases of decisions will, according to Adler, overcome problems of arbitrariness and secrecy which in the past have drawn so much critical fire in the direction of welfare. It is here and not in any return to legalism that she foresees the possibility of achieving justice for children.

Her own experiences in sitting as a member of juvenile panels adds considerable weight to her arguments. Clearly, she is swimming against the tide, both in terms of the present Government's "Get tough with young offenders" policy and in terms of the pragmatism and anti-intellectualism which pervades Westminster and Whitehall. Yet anyone who has the courage to stand up against the barbarism and hypocrisy that characterize much of juvenile justice in Great Britain and to attack the philistines with reasoned arguments, deserves to be widely read.

Michael King

Michael King is senior research fellow in law at Brunel University.

How jurists think

Lloyd's Introduction to Jurisprudence, fifth edition
by Lord Lloyd of Hampstead and M. D. A. Freeman
Stevens, £24.00
ISBN 0 420 47160 X and 47170 7

The compiler of a student book of materials on jurisprudence faces formidable problems. Here is a subject on which there is, and can be, no definitive agreement as to its scope. Furthermore, it is in many cases unlikely to be the major interest of students, who will approach it with some fear and on occasion with outright antagonism.

Now, about the first of these problems, given the financial exigencies of modern-day publishing, there is little that can be done. Courses in jurisprudence as part of English law degrees vary greatly. In order to obtain a reasonable share of the available market any book has perforce to spread its net fairly widely.

With regard to the second of these problems, more can perhaps be achieved. What is essential is for the text to do two things straight from the start: to capture the students' interest, and to lead them gently into the whole framework of jurisprudential thought by introducing them to the ways in which jurists think and the terminology which they use. It is this distinctively philosophical mode of thought which forms such a barrier to understanding to the novice. What is needed is a straightforward account of what jurists are up to and why it is important. Over-simplification is almost a virtue at this stage.

The way to capture students' interest is to show them how the theoretical questions which jurists investigate, underpin and influence practical solutions to problems in the law. Questions of criminal responsibility and punishment can be tapped to advantage here. Kenny's *Freewill and Responsibility* is an excellent illustration of how legal and philosophical issues of some complexity can be brought within the range of the non-specialist (and with no loss of rigour). Fuller's *Speluncean Explorers* is also a ready-made overview of major issues in legal philosophy (*Lloyd* does include an extract from this, but it is left undeveloped in the text).

The present work, now in its fifth edition, starts with a dense and somewhat abstract chapter on the nature of jurisprudence. An opportunity is surely lost here. How much more stimulating the book would have been if a challenging issue were raised immediately and the student asked to react to it. For instance, do we have a moral obligation to obey the law? Or is the fact that certain conduct is immoral sufficient to justify making that conduct punishable by law?

Of course, students will flounder initially, will put forward arguments which are both crude and inconsistent with one another But, with a little prompting they will see the importance of these issues and their significance in the practical application of the law. They will have learnt something about jurisprudence and will have done some for themselves. Only later, if at all, need they ponder the interminable arguments about the essential nature of jurisprudence.

Much of the book consists of an examination of the traditional schools of legal theory. The text is well written, the extracts informative. However, this division of the chapters only fosters the compartmentalized approach to this subject, which has been so heavily criticized in the past. Despite the problems indicated above, fewer topics should be examined. What is important is to establish the fundamentals in a lively and interesting way. If this is done, good students will be encouraged to look further for themselves.

Of course, all of this and more has been said many times before, notably by Professor Hart. Very little changes in English jurisprudence, or so it seems.

John Beaumont

John Beaumont is senior lecturer in law at Leeds Polytechnic.

Whose freedom?

Freedom of Speech
by Eric Barendt
Clarendon Press: Oxford University Press, £35.00
ISBN 0 19 825381 8

The destruction of draft cards during the Vietnam war: free expression?

Writings on the subject of freedom of speech in this country have traditionally fallen into one of two categories. Either they have been theoretical accounts of the principle itself (the most notable example, of course, being Mill's *Essay on Liberty*) or they have been expositions of particular areas of English law where freedom of speech considerations are, or ought to be, prominent (obscenity, blasphemy, meetings, processions). Hitherto there has been little attempt to examine these two aspects of the subject in parallel. Nor, more surprisingly, have academics sought to derive principles of freedom of expression from the several areas of English law.

Mr Barendt's monograph on the English law relating to freedom of speech encompasses not only the standard fare of civil liberties courses but also topics traditionally found much further afield, in tort textbooks (libel and slander) and consumer manuals (trade descriptions legislation). This raw material, once gathered together, is re-assessed in the light of general principle. To this end several overriding themes are deployed as tools of analysis. To what extent does the law protect free expression of opinion in contrast to the dissemination of fact? Is special protection accorded to "political speech" (however that is defined)? Can one intelligibly distinguish between speech which asserts a proposition and mere insult, or between pure speech situations and speech plus an element of conduct (for example, the wearing of political uniforms or, as in America in the 1960s, the burning of draft-cards by way of protest against the Vietnam War)? How far does English law impose prior restraints on speech – to Americans an especially insidious device – as opposed to punishing the speaker after the event?

At a more abstract level, is freedom of speech simply a liberty to speak unrestrained by law, or does it additionally entail a right of access to the media? Whose interests, anyway, are really protected where free speech exists – the speaker's (as, perhaps, with artistic expression); the audience's (as with the publication of factual data); or the general public's? Why, in any case , is freedom of speech so important – as an aid to the discovery of the truth; as a lubricant to the democratic process; or as part of a general claim to liberty?

The book follows the three-way comparative method – English law, United States law, and European Convention on Human Rights – which is now standard in the more academic human rights texts. The United States shares this country's common law tradition, with the added dimension of judicial review in the light of entrenched human rights guarantees. Prominent in this context is the First Amendment:

> Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or of the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

The comparision with the European Convention is part academic (it contains a substantial element of the civil law approach) and part pragmatic (it provides an effective mechanism for the scrutiny of the failings of British law). To these is added a further point of comparison: Article 5 of the Basic Law of West Germany. Together with the other articles of the German Constitution this provision sets out a fairly detailed right to freedom of expression. At first sight the selection of West Germany appears somewhat arbitrary – a feeling which is never completely dispelled in spite of the rich material which emerges in the course of the volume. In Germany, for example, the precise meaning of freedom of the press has been canvassed: in the event of an internal dispute who may claim the support of the guaranteed right – the proprietor, the editor, or the journalist? Nor is it surprising to find modern German law extending a substantially lesser degree of protection than the English-speaking systems to verbal attacks on racial and religious minorities.

Freedom of Speech was a pleasure to read. Mr Barendt writes fluently, and in a way which will surely engage the interest of the intelligent layman. His suggestions for reform of the law are sensible, if rather uncontroversial. He is fully aware of how recent advances in technology will lead to the re-assessment of established doctrine. (With the advent of cable and satellite broadcasting on a large scale, for example, would it be necessary any longer to impose a legal obligation of balance and impartiality on every broadcaster?) Above all, Mr Barendt has sharpened our perception of a most important part of English law. Indeed his account, combining as it does both black-letter law and legal theory, is reminiscent of recent writings on the theoretical underpinning of the law of contract. In this context, however, he surprisingly omits all mention of one of my own favourite cases. In *Clayton and Halsey* (1963) the pornographic dealer who sold his wares to two plain-clothes policemen was acquitted of a substantive charge under the Obscene Publications Act. Experienced members of the obscene publications squad, unlike the general public, were not liable to be depraved and corrupted by such material. In so ruling the court gave legal reality to the view advanced three centuries earlier, in Milton's *Areopagitica*, that the censor himself is deemed incorruptible.

Joseph Jaconelli

Joseph Jaconelli is senior lecturer in law at the University of Manchester.

NEW FROM MANCHESTER

The psychology of judicial sentencing
CATHERINE FITZMAURICE, KEN PEASE
0 7190 1819 6 (hb) £19.95

Past or future crimes
Deservedness and dangerousness in the sentencing of criminals
ANDREW VON HIRSCH
0 7190 1712 2 (hb) £21.00

Women on trial
A study of the female suspect, defendant and offender in the criminal law and criminal justice system
SUSAN S.M. EDWARDS
0 7190 1855 2 (pb) £7.50

Religion and the law
ST. JOHN A. ROBILLIARD
0 7190 0956 1 (hb) £27.50

Paternalism
JOHN KLEINIG
0 7190 1703 3 (hb) £19.50

manchester
UNIVERSITY PRESS Oxford Road Manchester M13 9PL

BOOKS

LAW

Laws for greatest happiness

The Thought of John Austin: jurisprudence, colonial reform and the British constitution
by Wilfred E. Rumble
Athlone Press, £25.00
ISBN 0 485 11292 2

This photograph of country policemen comes from Jonathan Brown's *The English Market Town: a social and economic history 1750–1914* (Crowood Press, £12.95).

This is a book about a rather unsuccessful 19th-century English equity lawyer who in 1829–30 gave a series of lectures in jurisprudence in the newly founded University College in London, the "godless college of Gower Street". The lawyer was John Austin and the lectures founded the dominant tradition in contemporary Anglo-Saxon legal analysis, legal positivism. Wilfred Rumble's book is about the life and the tradition.

As conventionally received, the life and work of Austin dovetail in the picture of a man too consumed with lawyerly precision, too conservative in his political views, to count as a proper Benthamite utilitarian, yet too abstract and comparative in his legal philosophy to satisfy his practically minded law students. As a scholarly biography, Rumble's book does not unsettle this picture too much, although it adds interesting accounts of Austin's close association with the utilitarian circle, his early writings on the evils of primogeniture and unlimited liability, his later activities as adviser on British colonial policy in Malta and author of a plea for a British constitution.

However, this is also a book, more contentiously, about the interpretation of Austin's writings and his placing within the tradition of legal positivism. As fixed for generations of readers by H. L. A. Hart's *The Concept of Law*, Austin is to be praised for his attempt to find a pure description of law quite irrespective of the moral worth of its content; for legal positivism laws don't have to be good laws to be laws. However, for Hart, Austin's description is still not lawyerly enough to capture the many splendoured aspects of the legal system. Austin's picture is too crude and coercive, all laws reduced to commands, the legal order dominated by the shadow of an all-powerful sovereign obeyed out of fear or habit, judges mere puppets.

Rumble disputes this received version of Austin, complaining that it is something of a caricature designed to emphasize differences where in fact there are similarities. Austin's account of the active role of judicial decision-making in creating law foreshadows aspects of Hart's own theories. But Rumble's major revisions of the conventional Austin are to show him to be far more of a utilitarian than is generally allowed.

Turning to Austin's critical writings on substantive law and his role in Malta, Rumble shows how Austin interrogates legal measures with the full repertoire of utilitarian tests, looking at the consequences of laws, how they interact with the social, economic and customary institutions of different societies, enlisting Malthusian population theory as one grid of understanding social dynamics. Even Austin's conservative appreciation of Hobbes can be seen as a calculation about the social need for laws. All this is persuasive evidence of Austin's closeness to the milieu, values and style of thinking of utilitarianism. It is also, of course, perfectly consistent with legal positivism which has always advertised its debunking of legal metaphysics as a useful preliminary to debating the worth of individual laws.

But Rumble's admittedly speculative final argument does pose real problems for the traditional placing of Austin. It finds a utilitarian heart in the very centre of his jurisprudence. The description of law in terms of commands, sovereigns, sanctions and habits, far from being an abstract generalization, is in fact an account of the form of law Austin seeks as best suited to govern according to utilitarian principles. On Rumble's account, there is "a practical necessity for commands and sovereigns of legally unlimited powers. They are necessary conditions for the achievement of the utilitarian end of government". When Austin sees law in terms of sanctions and threats, he is not attempting an analytical or descriptive point but drawing on Bentham's theories as a sort of social psychology of effective legal action.

This is a significant understanding of Austin but it also has wider implications for understanding how laws operate. It suggests that laws might be best understood in terms of their implied background theories of effective social intervention, the way laws are targeted at their ultimate objectives, their premises about the springs of human action and usable points of leverage; in short, to consider laws quite literally as instruments. Too often these questions are asked only by reference to the ends laws serve, the authorized or unauthorized values they express, rather than involving "how" questions about the kinds of means laws are.

Rumble himself finally fudges the issue in just this way, throwing away his, or Austin's insight. Austin's jurisprudence is finally reduced to a familiar sort of paradox of a hidden utilitarian "ought" behind the avowed neutrality of legal description. Still, for the beginning of the argument if not the end, indeed for the tour of Austin's little read writings and his re-positioning in contemporary debates, this is a most felicitous book.

Beverley Brown

Dr Brown is lecturer in the Centre for Criminology and the Social and Philosophical Study of Law at the University of Edinburgh.

Outside the courts

Alternatives to Criminal Courts: the potential for non-judicial dispute settlement
by Tony F. Marshall
Gower, £17.50
ISBN 0 566 05002 1

"Dispute resolution" is a growth industry. Part of this growth is taking place adjacent to our criminal courts, where it is hoped that conflict between victim and offender may be resolved in the quasi-private setting of extra-legal mediation schemes. Objectives include, for the offender: "diversion" (from prosecution and/or custody) and rehabilitation; for victims: a greater role in determining the response to "their" offence, and possibly an element of restitution; and for the justice system as a whole: a reduced burden on the criminal courts.

According to Marshall, the advantages of the due process reside in its claims to impartiality and uniformity, plus the scope which it offers for enforcement and appeal. But courts are concerned with past behaviour, rather than with promoting good relations in future between victim and offender. The key to Marshall's analysis therefore lies in the presumption that some crimes can appropriately be redefined in terms of "dispute". This is not just a matter of determining reasonable levels of reparation; he is concerned with finding a better response to the underlying problems which provoked the offending behaviour in the first place, thereby reconciling victim to offender and offender to community.

Marshall offers a comprehensive review of ideas and arguments relating to reform of our criminal justice system, but unfortunately he does not bring the various strands together in order to advance a coherent thesis. For example, while he employs the language of civil dispute – "settlement" and so on – he does not develop the arguments in support of his contention that, rather than simply punishing offenders, we should adopt less formal "reconciliation" procedures as a response to those crimes (never clearly defined) which reflect underlying problems of order and dispute.

Neither is Marshall's vision as radical as the foregoing might imply; he is not advocating a move towards a new kind of reparative justice, expressed in terms of "making good". Rather, he believes that reparation and reconciliation should be given greater prominence within what would remain, first and foremost, a punishing system. Second, he is concerned as much with efficient administration and cost savings as he is with the form of justice on offer, believing it necessary to reduce the flow of cases which is increasingly overburdening the courts, especially in metropolitan areas". Some of his schemes for reducing "demand" – such as the equivalent of a prescription charge for initiating prosecution – are hair-raising.

The book advocates "a systematic approach", but the inevitable tension between the disparate objectives of efficient processing (including "diversion" of part of the workload of the criminal courts) and the development of a system of justice which is responsive to citizens' needs and reflects their sense of fairness, while acknowledged, is not resolved. Marshall believes that "there is reason and scope to be searching for an even lower tier system that is cheaper and more streamlined (than magistrates' courts), or involves a greater degree of participation by the parties concerned". Unfortunately, procedures which are cheap and streamlined (but still controlled by professional personnel) are most unlikely to promote "participation".

But such criticisms may be unfair to a book intended primarily as a stock-taking exercise and drafted, presumably, some two years ago, when the "reparation" movement in this country was in its infancy. It has many of the faults to be expected of such a review, but the author has attempted – and achieved – a formidable gathering of evidence, information and ideas from a wide variety of sources. The book should therefore prove a valuable resource to all those engaged in the search for "alternatives" at the margins of our criminal justice system.

Gwynn Davis

Gwynn Davis is a research fellow in the department of social administration at the University of Bristol.

Burdens of proof

Theories of Evidence: Bentham and Wigmore
by William Twining
Weidenfeld & Nicholson, £16.95 and £8.95
ISBN 0 297 78668 7 and 78669 5

When the layman thinks about law and the legal system he probably thinks first and foremost about trials. Yet legal scholars have given relatively little thought to the range of problems that surrounds the trial process and the proof of facts in the trial. A rich body of legal writing deals with the law of evidence, but it focuses for the most part on the exclusionary rules of evidence, neglecting wider questions. Legal theorists, on the other hand, have preferred to concentrate on more general problems such as the relationship between law and justice, or law and the state.

In between the two levels of concern an important range of issues gets lost. What, for example, is the point of the trial process? Is it aimed solely at establishing the truth about the facts in dispute, or does it serve other values as well? What is it to "prove" this or that fact? What makes evidence relevant or irrelevant to a legal dispute? How are the rules of evidence law related to the quest for truth? To what extent is there a need for binding rules of evidence as opposed to rough guidelines?

In a paper published in 1980, William Twining described a sweeping personal research project for the investigation of such questions. At that stage he confessed that the project had at least 10 years to go before fruition. The present book represents an intermediate product of the continuing project. It might seem at first sight a rather curious piece of work, for it is basically an exposition of two other books: Bentham's *Rationale of Judicial Evidence*, and Wigmore's *Principles of Judicial Proof*. Most of us are unused to connecting the work of Bentham with the lesser known writings of an American law professor, so the choice of subject may seem baffling and intriguing at the same time. But it is part of Twining's object to demonstrate that both Bentham and Wigmore were highly significant figures in a tradition of rationalist thought about evidence and proof in adjudication. Indeed, Twining claims that Wigmore is the only writer since Bentham to attempt a comprehensive interdisciplinary theory of evidence and proof.

The book exhibits many of the characteristic features of Twining's work. One senses, for example, that he is almost as interested in the personalities of his two subjects as in their theories. He makes subtle use of that interest and insight to illuminate the substantive differences and similarities between Bentham and Wigmore. Although, at one level, the 18th-century radical philosopher and the 20th-century conservative lawyer look very different, Twining offers a plausible demonstration of the extent to which they share a common set of beliefs, with many of their differences being traceable to their particular perspectives and approaches: Bentham offering advice to the legislator, Wigmore seeking to instruct the practitioner.

Twining makes no bones about the fact that the book is basically expository in intention. But by sticking too firmly to his expository task, Twining sometimes fails to give us an adequate sense of what is distinctive about the theories he considers. Without some wider critical perspective being offered, the account of assumptions underlying the "rationalist tradition" of evidence scholarship can seem rather bland and unconvincing as an attempt to identify a truly distinct tradition. Some space is given to the familiar debates surrounding Bentham's instrumentalist view of legal procedure, but other critical standpoints are mentioned in passing without being adequately explained. At one point, for example, we are told that "holistic approaches" to the evaluation of evidence provide "a significantly different approach" from that accepted in the Anglo-American tradition. Yet actual discussion of this approach is restricted to a brief section in an appendix to the book. Perhaps Twining could not have satisfied these complaints without fundamentally broadening the character of his book. If that is so, such criticisms amount only to an indication of the eagerness with which we will look forward to his completion of the wider project.

N. E. Simmonds

N. E. Simmonds is fellow and director of studies in law at Corpus Christi College, Cambridge.

Unjust enrichment

An Introduction to the Law of Restitution
by Peter Birks
Clarendon Press: Oxford University Press, £40.00
ISBN 0 19 876074 4

In recent years the literature on the common law has been enriched by several interesting attempts to reconceptualize and reorganize its categories. One approach points out that the classic categorizations are incomplete and that, in particular, they fail to account for claims based on benefits received or unjust enrichment, the content of which is a duty to make restitution. Another, less conceptual approach, recognizes beneficial claims, but emphasizes the fluidity and interrelationship of all categories.

Peter Birks's lively and well-written book, like Goff and Jones's pioneering work on the topic, firmly and unashamedly takes the first approach. Both face the difficulty of presenting a law as a category not explicitly recognized by the courts. Goff and Jones do this by adopting an essentially pragmatic arrangement of restitution according to the substantive grounds for recovery. Birks's concern is with the structure of the subject rather than the molecules which make it up. His analysis is based on an elegant conceptual framework and careful differentiation of restitutionary claims from others.

For Birks "restitution is the response which consists in causing a person to give up to another an enrichment received at his expense or its value". He argues that there are two types of claim for restitution. The first, solely based on unjust enrichment by subtraction from the plaintiff, is an independent claim. The second, where the only way of showing an enrichment is at the expense of the plaintiff is by demonstrating that it was acquired by a breach of another legal duty such as tort or breach of contract, is a dependent claim and is an alternative to other responses more usually associated with breaches of duty, such as compensation.

Birks's structure does not always reflect the reasoning used in the cases or the general untidiness of caselaw; see, for instance, his distinction between actively created and passively retained rights in the context of restitutionary property claims. But to object to this is to mistake the nature of his enterprise. He recognizes that the underdevelopment of benefit-based claims means that the large number of cases not within the classic categories of English law could be explained in several ways. Any scheme is therefore open to this objection but a conceptual structure (however open-textured) is now required to help clarify and refine the relevant policy considerations, to facilitate analysis of the relationship between restitution and other legal categories and to prevent the cases from being seen as a wilderness of single instances.

Will Birks's framework do this? Despite the clarity of the analysis, there are several difficulties. One of his categories of "benefit" is free acceptance by the defendant. An obligation based on free acceptance, even if not strictly contractual, is arguably grounded in consent rather than unjust enrichment. He also treats services freely accepted as benefits even though there is no accretion to the defendant's property. How different is this from compensation for the plaintiff's reliance losses? These considerations undermine the sharpness of his distinction between restitutionary and other claims. In so doing they may also undermine his purpose in distinguishing independent and dependent restitutionary claims. This is to make it clear that while *prima facie* the former should not be affected by the rules and policies of other categories, the latter are subject to the rules of the primary claim.

This book is no introduction. It is a powerfully argued and sophisticated piece of work which shows beyond doubt that there is an independent class of claims generated by the receipt of a benefit. The only question is the size of the class.

Jack Beatson

Jack Beatson is fellow and tutor in law at Merton College, Oxford.

NOTICE BOARD

Appointments

Queen's University, Belfast, has announced a number of visiting professorships for 1986: in social anthropology, Dr Anna Czekanowska-Kulinska, director of the Institute of Musicology at the University of Warsaw; in applied mathematics and theoretical physics, Dr J. Caldwell, head of the school of mathematics and statistics at the Newcastle upon Tyne Polytechnic; in chemistry, Dr J. C. Tebby, head of the department of chemistry and biology at the North Staffordshire Polytechnic; in electrical and electronic engineering, Dr Wilfred Heginbotham, consultant engineer and Dr J. G. McWhirter, principal scientific officer at the Royal Signals and Radar Establishment, Malvern; in agricultural botany, Dr G. A. Jung, US Regional Pasture Research Laboratory at Pennsylvania; in pharmacology, Dr D. B. Worthen, section head of the Norwich Eaton Pharmaceuticals Inc, New York; in civil engineering, Mr Melvyn Bragg, author and broadcaster.

LLD: Sir John Harvey-Jones, chairman, Imperial Chemical Industries plc; Wing Commander Kenneth Stoddart, Lord Lieutenant, Merseyside; Mrs Betty Whelan, widow of Professor Robert Whelan, vice chancellor, University of Liverpool, 1977 to 1984.

DSc: Dr Mary Parke, formerly senior physiologist, Marine Biological Association, Plymouth; Sir David Smith, professor of rural economy, University of Oxford.

UMIST is to award honorary fellowships to: Dame Rose Heilbron, Dr Ronald Hill, Baroness Lockwood of Dewsbury, Sir William Mather and Professor Sir Frederick Warner.

BELFAST, QUEEN'S
LLD: Dr Helen Duosmore, for international services to the advancement of women.
DLit: Benedict Kiely, for contributions to literature.
DSc: Daniel J. Bradley, for distinction in physics; Professor Sir Graham Smith, for distinction in and services to astronomy; Sir Kenneth Stuart, for distinction in and services to medicine; Sir Austin Bide, for services to industry;
MD: James Smiley, for services to occupational medicine.
DSc(Eng): Sir Francis Tombs, for distinction in and services to electrical engineering; Alan Arthur Wells, for distinction in and services to civil engineering; Sir Peter Baxendell, CBE, for services to industry.
DSSc: Bernard Crick, for distinction in political science and services to political education.
MA: Doris Stanfield, for services to the community.
The Polish composer, Witold Lutoslawski, is to be conferred with the honorary degree of Doctor of Music in 1987.

IMPERIAL COLLEGE
Honorary fellowships: Sir Geoffrey Allen, FRS, director of research and engineering, Unilever plc; Emeritus Professor B. G. Neal, former prorector and head of the civil engineering department, Imperial College; The Baroness Warnock, DBE, Mistress, Girton College, Cambridge; Sir Toby Weaver, CB, governor Imperial College, former deputy secretary, department of education and science; Professor Dorothy Wedderburn, principal, Royal Holloway and Bedford New College, University of London.

Elected to an associateship of the Imperial College is Mr Henry Humbertstone, formerly foreman draughtsman at the college.

KENT
DLitt: Group Captain Leonard Cheshire, VC, OM, founder of the Cheshire Foundation and co-founder of the Ryder Cheshire Mission for the Relief of Suffering; Baroness Ryder of Warsaw and of Cavendish (Sue Ryder). CMG, OBE, founder and social worker, Sue Ryder Foundation for the Sick and Disabled and co-founder of the Ryder Cheshire Mission; Mr Terence Waite, MBE, adviser to the Archbishop of Canterbury on Anglican Communion Affairs.

Vernon Boys' Prize, to Dr R. J. Nicholas of the University of Oxford, for contributions in the field of low dimensional structures; Maxwell Medal and Prize, to Dr T. J. Bunny of the University of Oxford, for contributions to the theories of galactic formation and rotation; Holweck Medal and Prize, awarded jointly with the French Physical Society, made in alternate years to a British and a French physicist, to Professor G. G. Roberts of the Thorn EMI research laboratories, for pioneering studies in field of molecular electronics. Additionally, Professor Philip Anderson of Princeton University and Professor Abdus Salam of Imperial College were elected honorary fellows of the Institute. The royal Historical Society has announced that the Alexander Prize for 1986 has been awarded to Dr Chris Gwen-Wilson, department of medieval history, University of St Andrews, for his essay *The King and the Gentry in Fourteenth Century England*. The David Berry Prize for 1985 has been awarded to Dr G. Mark Dilworth, keeper of the Scottish Catholic Archives, for his essay on *The Commendator System in Scotland*.

(separation and identification of radicals by HPLC – ESR); Dr G. M. Davies, £29,183 from Scottish Home and Health Department (study of The Child Witness).

BELFAST, QUEEN'S
Dr R. C. Kenny and Professor G. P. Blair, £132,063 from SERC (computational fluid dynamics and laser doppler anemometry applied to scavenging flow in two-stroke engines); Dr K. J. Crawford, £10,488 from SERC (printing of strain measuring devices on to plastics); Dr I. Duncan, Dr W. D. McGrath and Dr T. Morrow, £11,220 from SERC (investigation of new systems for laser frequency up-conversion using vibrationally excited molecules); Faculty of Law, £20,000 and £80,000 from IBM United Kingdom Ltd (joint study to analyse currently available computer assisted learning); Dr R. F. Murphy, £40,000 from Proctor and Gamble Co (synthesis of specific peptides).

BRISTOL
Professor A. Keller, £169,397 from SERC (crystallization, microstructure and related behaviour of long chain molecules); Professor J. W. Steeds, Dr D. Cherns and Dr R. Vincent, £129,470 from SERC (provision of facilities for DX and medium VS into the 300 kV electron microscope at Bristol); Professor B. M. Bird, Mr C. A. McMahon and Dr R. D. Adams, £108,180 from SERC (high speed actuators for circular knitting machines); Dr R. Vincent, £64,421 from SERC (microstructural examination of metastable crystalline phases in evaporated films); Dr G. W. Neilson and Dr C. J. Wormald, £27,120 from SERC (structural and thermodynamic properties of ionic mixtures up to the critical region); Dr J. A. K. Howard, £20,670 from SERC (further studies by neutron and x-ray diffraction of deformation density in transition metal complexes); Dr D. Field and Professor R. N. Dixon, £11,630 from SERC (high resolution electron-molecule studies); Professor T. Pickering and Dr R. T. S. Worley, £98,206 from MRC (testicular oxytocin); Dr S. R. Soffe, £53,164 from MRC (cellular basis for production of rhythmic locomotor bursts by a spinal cord pattern generator); Dr N. L. Brown, £42,981 from MRC (DNA protein interactions in mercury resistance) (continued on page Ta501); Dr C. G. Proud, £20,783 from MRC (regulation of activity of eukaryotic protein synthesis initiation factor eIF-2).

Grants

ABERDEEN
Professor Hugh Miller and Dr I. R. Brown, £98,202 from Fountain Forestry Ltd (tree breeding and improvement); Dr C. E. Mullins, £62,221 from Overseas Development Administration (land setting and crusting behaviour of alfisols); Professor Frederick Glasser and Dr E. E. Lachowski, £77,638 from SERC (electron microscopy and analysis of inorganic minerals); Professor Alexander Penman, £10,000 from SERC (separation and identification of radicals by HPLC – ESR); Dr G. M. Davies, £29,183 from Scottish Home and Health Department (study of The Child Witness).

BELFAST, QUEEN'S
Dr R. C. Kenny and Professor G. P. Blair, £132,063 from SERC (computational fluid dynamics and laser doppler anemometry applied to scavenging flow in two-stroke engines); Dr K. J. Crawford, £10,488 from SERC (printing of strain measuring devices on to plastics); Dr I. Duncan, Dr W. D. McGrath and Dr T. Morrow, £11,220 from SERC (investigation of new systems for laser frequency up-conversion using vibrationally excited molecules); Faculty of Law, £20,000 and £80,000 from IBM United Kingdom Ltd (joint study to analyse currently available computer assisted learning); Dr R. F. Murphy, £40,000 from Proctor and Gamble Co (synthesis of specific peptides).

BRISTOL
Professor A. Keller, £169,397 from SERC (crystallization, microstructure and related behaviour of long chain molecules); Professor J. W. Steeds, Dr D. Cherns and Dr R. Vincent, £129,470 from SERC (provision of facilities for DX and medium VS into the 300 kV electron microscope at Bristol); Professor B. M. Bird, Mr C. A. McMahon and Dr R. D. Adams, £108,180 from SERC (high speed actuators for circular knitting machines); Dr R. Vincent, £64,421 from SERC (microstructural examination of metastable crystalline phases in evaporated films); Dr G. W. Neilson and Dr C. J. Wormald, £27,120 from SERC (structural and thermodynamic properties of ionic mixtures up to the critical region); Dr J. A. K. Howard, £20,670 from SERC (further studies by neutron and x-ray diffraction of deformation density in transition metal complexes); Dr D. Field and Professor R. N. Dixon, £11,630 from SERC (high resolution electron-molecule studies); Professor T. Pickering and Dr R. T. S. Worley, £98,206 from MRC (testicular oxytocin); Dr S. R. Soffe, £53,164 from MRC (cellular basis for production of rhythmic locomotor bursts by a spinal cord pattern generator); Dr N. L. Brown, £42,981 from MRC (DNA protein interactions in mercury resistance) (continued on page Ta501); Dr C. G. Proud, £20,783 from MRC (regulation of activity of eukaryotic protein synthesis initiation factor eIF-2).

Promotion

ABERDEEN
Senior lectureship: Mrs Ann Ambler (computing science).

Honorary degrees

LIVERPOOL
DLitt: Beryl Bainbridge, novelist; Professor Jean Gottman, emeritus professor of Geography, Oxford University; Melvyn Bragg, author and broadcaster.
LLD: Sir John Harvey-Jones, chairman, Imperial Chemical Industries plc; Wing Commander Kenneth Stoddart, Lord Lieutenant, Merseyside; Mrs Betty Whelan, widow of Professor Robert Whelan, vice chancellor, University of Liverpool, 1977 to 1984.

Awards

The Institute of Physics has made the following awards for 1986: Guthrie Medal and Prize, to Sir Denys Wilkinson of the University of Sussex, for contributions to nuclear physics; Glazebrook Medal and Prize, to Dr G. Manning of the Rutherford Appleton Laboratory, Chilton, Didcot, for contributions to the application of physics in the work of the laboratory, particularly in high energy physics, computing and the new Spallation Neutron Source; Bragg Medal and Prize, to Mr W. Lincoln Bragg of the London Institute of Education, for his seminal contributions to physics education in the 1950s and 1960s; Duddell Medal and Prize, to Dr B. F. Kuddle of the National Physical Laboratory, Teddington, for his contributions to precise metrology; Paterson Medal and Prize, to Dr E. P. Barnes, of the Royal Signals and Radar Establishment, Malvern, for his major contributions to the development of liquid crystal displays. Rutherford Medal and Prize, to Professor A. Astbury of the University of Victoria, Canada, for contributions to high energy particle physics; Charles Education of Ethnic Minorities in Britain since 1890" and speakers will include Dr Bill Williams, chairman of trustees, Manchester Jewish Museum; and Ian Grosvenor, leader, Afro-Caribbean Support Unit, Metropolitan Borough of Sandwell. Details from Patrick Orpen, Thames Polytechnic, Bexley Road, Eltham London SE9 2PQ.

The University of Southampton is hosting an international conference, *"Front Populaire-Frente Popular*: comparative perspectives of the Popular Front experiences of France and Spain 1936–1986", to be held between April 15 and 17. Full details available from Dr M. S. Alexander, Department of History, the University, Highfield, Southampton SO9 5NH. Telephone 0703 559122 x2211 or 2241.

The Linguistics of Writing, July 4 to 6, an international conference organized by the Programme in Literary Linguistics, Department of English Studies, Strathclyde University. Speakers will include: Frederic Jameson, Jacques Derrida, Jonathan Culler, David Lodge, Terry Eagleton. Details from Dr N. Fabb, tel 041-552 4400 x3600.

DLitt: Professor Simone Dorangeon, professor of English, University of Rheims and a founder member of the Canterbury/Rheims Twinning Committee; Mr Roy Fuller, poet and novelist and former professor of poetry in the University of Oxford; Patrick Heron, CBE, painter.
DSc: Professor A. L. Cullen, OBE, FRS, emeritus professor electrical engineering, University of London.
MA: Mr Brian Le Mar, clerk of works of the Dean and Chapter of Canterbury Cathedral.
MSc: Mr A. E. Coulson, former head of mathematics and computing, Dover Grammar School, honorary lecturer in computing, University of Kent, since 1971.

Events

The first UK conference on law and semiotics will be held at the University of Kent, July 28 to 31, 1986. Further details from Professor B. S. Jackson, Keynes College, The University, Canterbury, Kent, CT2 7NP or telephone 0227 66822 x7442.

The fifth annual conference on education and development in organizations will concern itself with "International Management Development: Challenges and Alternatives". It will be held between September 16 and 19 at the University of London. Further details from Christine Dytham, Gillow House, University of Lancaster, Bailrigg, Lancaster.

On Thursday May 1, the faculty of architecture, planning and estate management short course unit at Oxford Polytechnic is arranging a study visit to Kelmscott Manor, home of the artist, designer and social visionary William Morris. Details from Mike Breakell or Carolin Tidbury on 0865 60035.

The annual day conference of the History of Education Society will be held on May 10 at Birmingham University. This year's theme is to be "The Education of Ethnic Minorities in Britain since 1890" and speakers will include Dr Bill Williams, chairman of trustees, Manchester Jewish Museum; and Ian Grosvenor, leader, Afro-Caribbean Support Unit, Metropolitan Borough of Sandwell. Details from Patrick Orpen, Thames Polytechnic, Bexley Road, Eltham London SE9 2PQ.

The University of Southampton is hosting an international conference, *"Front Populaire-Frente Popular*: comparative perspectives of the Popular Front experiences of France and Spain 1936–1986", to be held between April 15 and 17. Full details available from Dr M. S. Alexander, Department of History, the University, Highfield, Southampton SO9 5NH. Telephone 0703 559122 x2211 or 2241.

The Linguistics of Writing, July 4 to 6, an international conference organized by the Programme in Literary Linguistics, Department of English Studies, Strathclyde University. Speakers will include: Frederic Jameson, Jacques Derrida, Jonathan Culler, David Lodge, Terry Eagleton. Details from Dr N. Fabb, tel 041-552 4400 x3600.

Our image of Weimar Germany owes more to the magazine *Simplicissimus* than to any other source. Founded in 1896, its liberal style suffered a hiccup during the First World War when, uncharacteristically, it threw its weight behind the Kaiser. In the early 1930s, it offered staunch opposition to the Nazis, disappearing only under Hitler's chancellorship. The magazine is probably best remembered outside Germany for its cartoonists and caricaturists – who included George Grosz in their number. A selection of graphic work from the magazine is on show at the Goethe-Institut, 50 Princes Gate, Exhibition Road, London SW7 from April 15 until May 10.

Open University viewing

Saturday April 12

BBC1
6.45 Telecommunication Systems. Noise and interference. (P21; prog 5).
7.10 Language in Use. Hospital realities. (E263; prog 3).
7.35 Decision Making in Education. After the Act. (E333; prog 1).
8.00 Biochemistry and Cell Biology. Superbugs (S325; prog 3).

BBC2
6.00* Discovering Physics. Which way to turn? (P271; prog 5).
7.15 Vision: The Augustan Age. Interior decoration. (A303; prog 3).
7.40 Psychology, Development and Learning. Old dog, new trick. (E206; prog 4).
8.05 Third World Studies. St Lucia: people and celebrations. (U204; prog 15).
8.30 Popular Culture. British Cinema of the 1930s: comedy. (U205; prog 3).
8.55 Ethnic Minorities and Community Relations. British to British: the long road to Chatham. (E262; prog 3).
9.20 Art in 15th-century Italy. The Sassetti Chapel, Santa Trinita. (A353; prog 4).
9.45 Computer Based Information Systems. STC Case Study. (M352; prog 3).
10.10 Introduction to Pure Mathematics. Completeness. (M203; prog 8).
10.35 Mathematical Models and Methods. Ill-conditioning in linear equations. (MST204; prog 9).
11.00 Introduction to Calculus. Functions and graphs. (MS283; prog 5).
11.25 The Handicapped Person in the Community. A question of assessment. (P251; prog 3).
11.50 Introductory Electronics. Frequency Analysis. (T281; prog 3).
12.15 Graphs, Networks and Design. Counting Atoms. (TM361; prog 4).
12.40 Modern Art and Modernism. Impressionism and post-Impressionism as style labels. (A315; prog 8).
13.05 The Changing Countryside. Spoiling the view. (PD270; prog 4).
13.30 Environmental Control and Public Health. Air Pollution, 1: effects and disperse. (T234; prog 1).

RADIO 3 VHF
6.55 Contemporary Issues in Education. Education Bulletin 2. (E206; prog 7).
12.15 Images and Information. Exploring frequency space. (T270; prog 6).
12.40 Animal Physiology. The sunbathers. (S224; prog 3).
13.05 Managing in Organizations. Managing the managers. (T244; prog 2).
13.30 Geology Checklist: mapping the Mendip Anticline. (S236; prog 4).

RADIO 3 VHF
6.35 Art in Italy 1480–1500. Villa Madama. (A352; prog 2).

RADIO 4 VHF
7.00* Maths foundation course. Foundation maths 4. (M101; prog 4).
7.20* The Enlightenment. Hume's "Science of Man". (A304; prog 8).
7.40 Social Sciences foundation course. Class citizenship and social inequality. (D102; prog 5).

Sunday April 13

BBC1
6.45 Biology, Brain and Behaviour. Neurophysiology. (S0206; prog 4).
7.10 An Introduction to Number Theory and Geometric Topology. The projective plane. (M383; prog 2).
7.35* Ecology. Tropical rain forest. (S236; prog 5).
8.00 The Nature of Chemistry. Stereochemistry of carbonyl addition reactions. (S306; prog 10).

BBC2
6.50 Education for Adults. Have you done your homework, Mummy? (E355; prog 7).
7.15 Biology: Form and Function. The Rod Cell. (S202; prog 9).
7.40 Conflict and Stability in the Development of Modern Europe. Work: the new discipline. (A309; prog 3).
8.05 19th-century England. Architecture and Society 3: the God that rules. (A203; prog 8).
8.30 State and Society. Broadcast rituals. 1. (D209; prog 5).
8.55 Policies, People and Administration. The Borderline case. (D356; prog 4).
9.20 Social Sciences foundation course. Brian's Britain. (D102; prog 10).
9.45 Maths foundation course. Least squares. (M101; prog 8).
10.10 Arts foundation course. Argument on television: 2. (A101; prog 9).
10.35 Science foundation course. Measuring electrons and atoms. (S101; prog 10).
11.00 Decision Making in Britain. Other people's children. (D308; prog 4).
11.25 Business Economics. The gamble of investment? (D324; prog 3).
11.50 Shakespeare. Antony and Cleopatra. (A361; prog 6).

Monday April 14

BBC2
6.55* Maths foundation course. Least squares. (M101; prog 8).
7.20 to be announced.
RADIO 3 VHF
6.55* Contemporary Issues in Education. Education Bulletin 2. (E206; prog 7).

RADIO 4 VHF
22.30 Arts foundation course. Uses and abuses of definition. (A101; prog 9).
23.50 The Enlightenment. The aims of "The Enquiry". (A304; prog 9).

Tuesday April 15

BBC2
6.55* Science foundation course. Measuring electrons and atoms. (S101; prog 10).
22.30 Contemporary Issues in Education. Let there be music. (E206, prog 9).

RADIO 3 VHF
6.35 Modern Art and Modernism. Cezanne and the art market; Belinda Thompson. (A315; prog 9).

RADIO 4 VHF
22.30 Open Forum. Information programme for OU students.
22.50 State and Society. Democracy in Theory and Practice. (D209; prog 3).

Wednesday April 16

BBC2
6.55 Computer Based Information Systems. OCL – data modelling. (M352; prog 4).
22.30 Arts foundation course. Argument on television: 2. (A101; prog 9).
23.55* Third World Studies. St Lucia: people and celebrations. (U204; prog 15).

RADIO 3 VHF
6.35* Arts foundation course. Uses and abuses of definition. (A101; prog 9).

Thursday April 17

BBC2
6.55* Social Sciences foundation course Brian's Britain. (D102; prog 10).
22.30 Weekend Outlook.
23.35* Third World Studies. St Lucia: people and celebrations. (U204; prog 15).

RADIO 3 VHF
6.35* Arts foundation course. Uses and abuses of definition. (A101; prog 9).

Friday April 18

BBC2
6.55* Contemporary Issues in Education. Let there be music. (E206; prog 9).
7.20* Weekend Outlook.

RADIO 3 VHF
6.35 The 19th-century Novel and its Legacy. Dickens and Balzac. (A312; prog 5).

NEWCASTLE UPON TYNE POLYTECHNIC
SCHOOL OF ENGLISH AND HISTORY

THE FIRST YEAR EXPERIENCE CONFERENCE
JULY 7–11

THE WITZENHAUSEN STAFF DEVELOPMENT SEMINAR JUNE 24–29

DID YOU WRITE TO US?

Mail posted between February 10 and February 26 about these two meetings may not have reached us.

IF YOU WROTE PLEASE SEND ANOTHER COPY OF YOUR LETTER AS SOON AS POSSIBLE

If you didn't write to us, why not write before April 30 and find out about them?

Write to: Dr Chris de Winter-Hebron, Conference Organiser, Faculty of Humanities, Newcastle Polytechnic NE1 8ST

CLASSIFIED ADVERTISEMENTS

The Times Higher Education Supplement

to place advertisements write to or telephone:

The Advertisement Manager,
The Times Higher Education Supplement,
Priory House, St John's Lane, London EC1M 4BX.
Tel: 01-253 3000. Telex 264971
All advertisements published subject to the Terms and Conditions of Times Newspapers Ltd (available on request)

Rates:	copy deadlines:
Classified Display – £13.35 pscc Minimum size: 9cm × 1 col @ £120.15 Classified Linage – £2.58 per line Minimum 3 lines – @ £7.74 Box number – £2.00 Exclusive of V.A.T.	Classified Display: Friday in the week prior to publication Classified Linage: Monday 10.00 am in the week of publication

Appointments

Universities
Fellowships
Research and Studentships
Polytechnics
Colleges of Higher Education
Colleges with Teacher Education
Colleges and Institutes of Technology
Technical Colleges
Colleges of Further Education
Colleges and Departments of Art
Administration
Overseas
Adult Education
Librarians
General Vacancies
Industry and Commerce

Other classifications

Exhibitions
Awards
Conferences and Seminars
Courses
Personal
For Sale and Wanted
Holidays and Accommodation

All box no. replies should be sent to THES at the above address

Universities

UNIVERSITY OF THE WEST INDIES
Mona, Jamaica

Applications are invited for the following posts

Professor of Neurosurgery

Successful applicant expected to give academic leadership in teaching and research activities in Neurosurgery in Department of Surgery which prepares students for the MB BS and DM degrees. He/she will also hold Consultant appointment with the University Hospital for which an honorarium of J$22,798 per annum will be payable. An travelling allowance of J$1,200 per annum by the Hospital.

Professor of Applied Economics

Applicants should be qualified in Economic Theory and in one or more of the following fields: Quantitative Techniques, Econometrics, Operations Research, and Monetary Economics. The person appointed will be expected to undertake both undergraduate and postgraduate teaching. Duties to be assumed by September 1, 1986, or as soon as possible thereafter.

Professor of Pure Mathematics

Applicants of suitable stature in any area will be considered.

Lecturer in the Teaching of Mathematics
Department of Educational Studies
Faculty of Education

Successful applicant will be required to teach undergraduate and postgraduate students for the Certificate and Diploma in Education and the BEd, MA (Ed) and MEd degrees. Knowledge of Computer Science as well as ability to teach Research Methods and/or an area in Foundations of Education would be an asset. Applicants should have postgraduate qualifications in Education with specializations in Teaching of Mathematics and related areas.

Lecturer/Assistant Lecturer in Botany

Applicants must possess a first degree in Botany or Agricultural Botany. Preference to applicants with postgraduate qualifications and teaching experience in Plant Ecology including Forest Ecology and or Forest Management. Duties to be assumed as soon as possible

Lecturers/Assistant Lecturers
Department of Management Studies

Applicants should be strongly qualified in one or more of the following areas: Accounting, Business Policy, Economic Policy (as related to business), Marketing, Organizational Theory and Behaviour, Personnel Management and Industrial Relations, and Production and Operations Management. The persons appointed will be expected to undertake both undergraduate and postgraduate teaching. Duties to be assumed by September 1 1986, or as soon as possible thereafter.

SALARY SCALES: Up to 30/11/86 – PROFESSOR (Medical) in range J$42,908–49,846 PROFESSOR (Non-Medical) in range J$38,340–47,194 LECTURER J$23,868 x 756 – 28,218 (S) x 825 – 33,348 ASSISTANT LECTURER J$20,376 x 717 – 31,313 From 1/12/86 – PROFESSOR (Medical) in Range J$56,978–71,397 PROFESSOR (Non-Medical) in range J$50,976–67,465 LECTURER J$33,960 x 1,110–40,320 (S) x 1,188–47,448 ASSISTANT LECTURER J$27,900 x 1,032–29,964.

Up to five full economy class passages plus baggage allowance up to US$900 on appointment and on termination. Special allowance up to US$900 on academic books and teaching/research equipment on appointment. Unfurnished accommodation at rental of J$360 per annum; or housing allowance of 30% of pensionable salary. UWI contribution of equivalent of 10% of pensionable salary to Superannuation Scheme. Subsidised Health Service. Annual Study and Travel Grant of J$5,580 for self, J$1,743 for spouse, and J$591 each for up to three (3) children. Book Grant up to J$1,500 per annum. Entertainment Allowance. Transportation Allowance to persons who own and operate a motor vehicle.

Detailed applications (three copies) giving full particulars of qualifications and experience, date of birth, marital status, and the names and addresses of three referees should be sent as soon as possible to the Campus Registrar, UWI, Mona, Kingston 7, Jamaica, West Indies. Applicants in the U.K. should also send one copy to the Secretary General, Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H 0PF. Further details obtainable from either source.

(74886)

LECTURESHIPS IN LAW

University of Tasmania

Applications are invited for two tenurable Lectureships in the Faculty of Law. The appointees must be able to take up duty on 1 July 1986. Persons interested in appointment only on a contract basis, will be considered. Candidates must have at least a Master's degree in law, have some knowledge of Australian law, and should be admitted to practice law in an Australian jurisdiction. Experience in legal practice would be an advantage. No special field of interest is specified. Enquiries about academic aspects to Professor R.A. Brown (tel: (0) 02.202073). The present Lecturer's salary scale is $ A27,233 × 7 increments – $ 35,777 p.a.

Application form and further information available from the Staff office in the University (tel: (0) 02.202013), or the Secretary General, Association of Commonwealth Universities (Appts), 36 Gordon Square, London SC1H 0PF. Applications must reach the Staff Officer, University of Tasmania, Box 252c, G.P.O., Hobart, Tasmania, Australia, by *16 May 1986*.

The University is an equal opportunity employer.

(74888)

nihe
limerick institute of technology

NIHE, Limerick, developed as Ireland's first technological university, is located on a parkland campus at the centre of the 500-acre Riverside Plassey Technological Park. NIHE was established with World Bank Finance to meet the need for graduate and postgraduate expertise created by the development in scale and sophistication of the Irish economy.

NIHE is composed of 3 constituent colleges, Engineering and Science, Business, Humanities. Programmes of study are offered to Bachelor, Masters and Doctorate levels and there are over 3,000 students currently enrolled. Additional programmes of education and research are now being established in the new second phase of development, which was financed by the European Investment Bank.

New opportunities arise with the further development of academic programmes and the expansion of applied research activity.

The College of Business operates a wide range of degree programmes at undergraduate and postgraduate levels. The College has a commitment to serving the needs of business and industry and the professions through the provision of a variety of professional and post-experience courses including the MBA programme.

Those with an appropriate record of achievement wishing to join faculty playing a key role in developments at NIHE, and the Plassey Technological Park, are invited to apply for the following:

ACCOUNTING/FINANCE
LECTURER/ASSISTANT LECTURER (2 POSTS)

ECONOMICS
LECTURER/ASSISTANT LECTURER

PERSONNEL MANAGEMENT
ASSISTANT LECTURER

SALARY SCALES:
Lecturer IR£16,152–IR£19,852 p.a.
Assistant Lecturer IR£11,648–IR£14,518 p.a.

Application material available from the Personnel Department, National Institute for Higher Education, Plassey Technological Park, Limerick, Ireland, should be completed and returned by Friday 2nd May, 1986.

University of Exeter

Applications are invited for the following posts in the Faculties of Science and Engineering:

CHAIR OF COMPUTER SCIENCE

This post, in the Faculty of Science, is tenable from 1st October 1986. The present interests of the Department are in Artificial Intelligence and Software Engineering. Whilst it is intended to maintain an active interest in these areas, the new appointment may be made in any area of Computer Science.

Salary will be on the agreed professorial range, current minimum £19,010 per annum (under review). Closing date 9th May 1986.

LECTURESHIPS IN ENGINEERING SCIENCE

Four posts: two permanent, two temporary appointments, tenable from 1st October 1986.

The Faculty's work is conducted in a General Engineering context. Preference will be given to candidates with particular interests in Electronics applied to Mechanical Engineering, and in areas associated with Design, Production, Manufacture and Maintenance.

Salary will be on the scale £8,020–£15,700 per annum (under review). It is expected that appointment to the two temporary posts will be made within the range £8,020–£11,275 per annum. Closing date 16th May 1986.

Further particulars for the above posts may be obtained from the Personnel Office, University of Exeter, Exeter EX4 4QJ. (74849)

Coláiste na hOllscoile Corcaigh
University College Cork

LECTURESHIP IN GEOLOGY

Applications are invited for a full-time permanent post as Lecturer in the Department of Geology. The post will be filled at Assistant Lecturer/College Lecturer or Statutory Lecturer level, depending on the experience and qualifications of the successful candidate.

Applications will be particularly welcome from Palaeontologists/Stratigraphers who can bring expertise and leadership to develop soundly based courses in these fields at the undergraduate level and to initiate and supervise postgraduate research in these areas.

The salary scales are:

Assistant Lecturer	IR£11,088 – IR£12,259 p.a.
College Lecturer	IR£12,740 – IR£15,191 Bar
	IR£14,358 – IR£16,354 p.a.
Statutory Lecturer	IR£15,487 – IR£22,005 p.a.

Application forms and further details of the post may be obtained from the undersigned. Latest date for receipt of completed applications is **Friday, 2 May, 1986.**

M. F. Kelleher *Secretary*

(74887)

Coiste Gairmoideachais Chathair Chorcaí
CITY OF CORK VOCATIONAL EDUCATION COMMITTEE

CRAWFORD MUNICIPAL SCHOOL OF ART

Applications are invited from suitably qualified candidates for appointment to the following whole-time posts:

HEAD OF FINE ART
(Senior Lecturer II)

HEAD OF DESIGN
(Senior Lecturer I)

Qualifications in accordance with the regulations of the Department of Education.

Salary Scale: Senior Lecturer II, IR£17,858 – IR£22,005
Senior Lecturer I, IR£16,690 – IR£20,696

Details of the above posts are available from: Personnel Office, City of Cork Vocational Education Committee, Emmet Place, Cork, Ireland. Tel. No. 021/965033.

Closing Date: The latest date for receipt of completed applications is *5 p.m. Friday, 2 May, 1986.*

(74857)

Coláiste na hOllscoile Gaillimh
UNIVERSITY COLLEGE GALWAY

IRELAND

LECTURESHIP IN MECHANICAL ENGINEERING

Applications are invited for the above full-time, statutory post from academically qualified candidates with appropriate industrial or research experience. Duties will include teaching at both undergraduate and graduate levels while conducting an active research programme and developing industrial and other sponsorship for that research.

Salary scale: IR£15,484 x (7) – IR£22,005.

Closing date for receipt of applications: *8th May, 1986.*

Further information may be obtained from the Registrar, University College Galway, Ireland.

(74878)

LOUGHBOROUGH UNIVERSITY OF TECHNOLOGY
LECTURESHIP IN MECHANICAL ENGINEERING

Applications are invited for a Lectureship within the Department of Mechanical Engineering. The post is one of a number which will arise from the introduction in October 1986 of a course in Electro Mechanical Power Engineering (EMPE), directed towards the needs of manufacturing companies in this activity.

Applicants should be graduates with relevant experience in either EMPE or any advancing area of mechanical engineering. The appointment will be made on the lower half of the salary scale £8,020–£15,700. Requests for further particulars and application form to Paul Johnson, Establishment Officer, quoting reference number 86/12/MC.

Loughborough *Leicestershire* (74877)

IMPERIAL COLLEGE OF SCIENCE & TECHNOLOGY
(University of London)

LECTURESHIP IN POWER ELECTRONICS

We are looking for an enthusiastic and talented lecturer to join a small but active group working on special drives and power electronics.

Ideally you will have a good research record in the area. However, we would be very pleased to talk to anyone who has achievements in other fields provided that he would enjoy research in power electronics and has a genuine commitment to teaching at the undergraduate and post-graduate levels.

Salary, according to experience, in the scale £9,317 to £16,997 including London Allowance.

If you are interested please write to or telephone

Professor David Mayne FRS, Head of Department of Electrical Engineering, Imperial College, London SW7 2BT. Telephone 01-589 5111 ext 5101.

Closing date for applications 09 April 1986.

(74867)

University of Edinburgh
Department of Mathematics

LECTURESHIP IN MATHEMATICS

Applications are invited for a Lectureship in Mathematics to be held in the new Department. The appointment will commence on 1 October 1986, or at a date to be decided between the Department and the successful candidate.

Candidates should have a strong research interest in mathematical problems related to computing or alternatively to some aspect of Information Technology, such as Artificial Intelligence, Computer Science or Electrical Engineering. This new qualification is part of an initiative within the Mathematics Department to strengthen its work in areas related to Information Technology.

The appointment will be made within the salary range £8,020 – £15,700.

Further particulars are available from the Personnel Office, University of Edinburgh, 65 South Bridge, Edinburgh EH1 1LZ, with whom applications (6 copies) including curriculum vitae and the names and addresses of three referees, should be lodged not later than 7th May 1986.

Please quote reference no. 1999. (54842) H1

LOUGHBOROUGH UNIVERSITY OF TECHNOLOGY

Experimental Officer

Applications are invited for a post of Experimental Officer in the Department of Electronic and Electrical Engineering. The post will provide support for the teaching and research activities of a group of academic staff with interests in the area of Electromechanical Power Engineering. The work will be varied, mainly in the field of electronic/electrical engineering, but a knowledge of machine tools and general workshop practice would be an advantage. Minimum qualifications of a degree and at least two years relevant experience are required. Initial salary will be on the scale £7,055 – £10,555 per annum (under review from 1 April 1986).

Requests for further particulars and application forms to Paul Johnson, Establishment Officer, quoting reference number 86/11 EL.

Loughborough *Leicestershire* H1

Southampton THE UNIVERSITY

STUDENTS' UNION

Applications are invited for the post of Administrative Assistant in the Education and Welfare Department, to commence on 1st September 1986.

Salary Scale Administrative 1A with Superannuation
£7,055 – £12,780 per annum.

This is a senior appointment in the Students' Union and applicants should be experienced in welfare casework, research/information service and office administration. The position is a demanding one and a genuine concern for the welfare of students and flexibility in working arrangements are essential.

Further particulars from the President, University of Southampton, Students' Union, Highfield, Southampton SO9 5NH, to whom applications must be returned by 30 April, 1986. (74832)

IMPERIAL COLLEGE OF SCIENCE & TECHNOLOGY
(University of London)

LECTURESHIP IN ELECTRICAL AND ELECTRONIC ENGINEERING

The Department is participating in the Engineering and Technology Programme and will expand over the next few years. We are looking for talented staff to join active research groups in several areas including digital communications, VLSI design, semi-processing, information engineering and power electronics. We have an excellent reputation for research and have attracted significant support from Research Councils, Government Departments, industry and other funding agencies.

The main requirement is an excellent teaching and research record, ideally in one of the areas listed above, but applications from women and men with achievements in any branch of the physical sciences, pure or applied would be welcomed. Enthusiasm for research in the areas of interest to us and a commitment to undergraduate and post-graduate teaching are essential.

Salary according to experience in the scale £9,317 to £16,997 including London Allowance.

If you are interested please phone or write to:

Professor David Mayne FRS, Head of Department of Electrical Engineering, Imperial College, London SW7 2BT. Telephone 01-589 5111 ext 5101.

Closing date 2 May 1986.

(74884)

UNIVERSITY OF BIRMINGHAM

Centre for Computing and Computer Science

Chair of Computer Science

Applications are invited for a new Chair of Computer Science which will become available from 1st October 1986 or earlier by arrangement. The appointment is intended to strengthen the research base of the Centre. Preference may be given to candidates with an established research record in one or more of the areas of Software Engineering, Man/Machine Interaction, Intelligent Knowledge Based Systems and Communications. Academic or appropriate industrial experience will be considered.

Salary in the professorial range, plus superannuation.

Further particulars available from the Vice Chancellor, University of Birmingham, PO Box 363, Birmingham B15 2TT, to whom applications (15 copies: one from overseas applicants) should be sent by 9th May 1986.

An Equal Opportunities Employer

(74839)

UNIVERSITY OF BIRMINGHAM
Faculty of Engineering

Chair of Electronic and Electrical Engineering

Applications are invited for the Chair of Electronic and Electrical Engineering which is currently vacant. Whilst candidates in any area of electronic and electrical engineering will be considered, the preferred fields of interest are:

Silicon Systems (eg. VLSI)
Opto-electronics
Signal Processing
Digital Communications

Salary in the professorial range, plus superannuation.

Further particulars available from the Vice-Chancellor, University of Birmingham, PO Box 363, Birmingham B15 2TT to whom applications (15 copies: one from overseas cnadidates) should be sent by 9th May 1986.

An Equal Opportunities Employer.

(74858)

IMPERIAL COLLEGE
ELECTRICAL AND ENGINEERING DEPARTMENT
ENERGY AND POWER SYSTEMS GROUP

Software Engineer

required for a new SERC funded project on the operational planning of power systems. The successful applicant will be responsible for maintaining the group's MICROVAX II, Sun workstations and IBM PC and BBC Master computers and links to the College's new VAX 8600 CAD CASE machine. The post involves the development of a range of commercially marketable interactive software packages and the associated data bases in VAX VMS and UNIX environments.

Applicants should hold a university degree or equivalent qualification and preferably have experience of VMS or UNIX and knowledge of Fortran and or Pascal. Familiarity with computer graphics an advantage.

The appointment is immediate, with salary in the range £8,352–£10,792, including London Allowance. Applications, with the names and addresses of three referees, by Friday May 9th 1986, to Dr M. J. Short, Dept. of Electrical Engineering, Imperial College, London SW7 2BT – from whom further information can be obtained on 01-589 5111, Ext 5114.

(74885)

University of Strathclyde
DEPARTMENT OF ELECTRONIC AND ELECTRICAL ENGINEERING

LECTURESHIP IN OPTICAL ELECTRONICS

The University invites applications from active research workers to join an expanding team investigating optical applications in electronic systems. Current work embraces fibre optics and non-linear systems for sensing, signal processing and communications

Salary on Lecturer Scale — £8,020–£15,700 pa. USS benefit.

Further particulars and application forms (quote ref: 19/86) are available from Staff Office, University of Strathclyde, McCance Building, 16 Richmond Street, Glasgow G1 1XQ. Closing date for applications: 9 May 1986.

UCG Coláiste na hOllscoile Gaillimh
UNIVERSITY COLLEGE GALWAY

IRELAND

JUNIOR LECTURESHIP IN ECONOMICS

Applications are invited for the above post. The Junior Lectureship is a full-time post with a salary scale of IR£10,713 × (9) – IR£14,756.

Applicants should have at least a Master's Degree in Economics and an ability to teach Microeconomics or Macroeconics is essential. The appointee would be expected to develop his/her own research interest. Applications (including curriculum vitae and the names of 3 to 5 referees) should be lodged with the Registrar, University College, Galway, Ireland, *not later than 8 May 1986.*

(74900)

The University of Sydney

ASSOCIATE PROFESSORSHIP IN SCHOOL OF ELECTRICAL ENGINEERING

A senior staff member is needed to provide leadership and direction in the following areas: in teaching – to design, develop and deliver courses in the digital, signals and electronics area and in research – to be Director of the Laboratory for Imaging Science and Engineering within the School and be involved particularly with the ongoing medical, imaging research programme.

The successful applicant will need to have demonstrated a proven record in research and teaching and in course development experience and in administrative work. Given the current climate in engineering, evidence of a high degree of interaction with new technology industry and the profession will be expected. The standard of excellence required in an Associate Professorship is comparable with that of a person who would be seriously considered for a Chair in this University.

Salary: $A46,150 per annum.

Applications, quoting reference no 13/01, including curriculum vitae, list of publications and the names and addresses of three referees, to the Registrar, University of Sydney, NSW 2006, Australia, by 14 May 1986.

The University reserves the right not to proceed with any appointment for financial or other reasons.

Further general information is available from the Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H 0PF, or from the Registrar of the University, Box 36, Dunedin, New Zealand.

Applications close on 30 June 1986. (01164) H1

University of Otago
Dunedin, New Zealand

CHAIR IN INFORMATION SYSTEMS

Applications are invited for the Foundation Chair in Information Systems in the Department of Quantitative and Computer Studies within the Faculty of Commerce.

Members of the staff of the department teach at undergraduate (including Ph.D.) and post experience levels and undertake research with particular interests in the analysis, design, implementation and management of Information Systems. Additional areas of interest in the department include Quantitative Methods and Operations Research. Candidates should have at least an academic background (tertiary qualifications) and be able to provide leadership in both teaching and research in the Information Systems field. opportunities exist for specialisation within this area.

Commercial computer technology is advanced and the pace of development is accelerating.

Professorial salaries are paid within a range between NZ$63,000 and $77,300 per annum.

Applicants are invited to write for further particulars, available from the Secretary General, Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H 0PF, or from the Registrar of the University, P.O. Box 56, Dunedin, New Zealand.

Applications close on 30 June 1986. (01164) H1

Oxford
Lady Margaret Hall

TEMPORARY LECTURESHIP IN PHILOSOPHY

Applications are invited for a limited-term College Lectureship in Philosophy, tenable from 1 October 1986. The holder will be expected to teach on average twelve hours a week.

Salary will depend on age and experience, but will be not less than £7,000 p.a. The Lecturer may receive accommodation in College for a small housing allowance in lieu) and will be entitled to meals in College free of charge.

Further particulars may be obtained from the Principal's Secretary, Lady Margaret Hall, Oxford OX2 6QA, who should receive completed applications (6 copies) by 5th May 1986. (54839) H1

University of Manchester
Manchester Business School

CHAIR IN ORGANISATIONAL BEHAVIOUR

The University invites applications for a Chair in Organisational Behaviour. This Chair will become vacant following the retirement at the end of September next year of Professor Tom Lupton.

The salary will be in the normal professorial range with U.S.S. superannuation benefits.

Detailed applications (suitable for photocopying) containing the names of three referees should reach the Registrar, The University, Manchester M13 9PL (from whom further particulars may be obtained) before May 5th, 1986. (91165) H1

Universities continued

UNIVERSITY OF EAST ANGLIA NORWICH

School of Information Systems

Chair in Computing Science

Applications are invited for a newly established Chair in Computing Science, tenable from 1 September 1986 within the School of Information Systems. This position arises from additional UGC support to the University to reinforce teaching on engineering and technology programmes and more particularly, to strengthen research in computing science with special reference to software engineering. Candidates should have a proven record of contributions to some mainstream aspect of these fields, in either an academic or an industrial context. The person appointed will be expected to spearhead research at the forefront of information technology, focusing for instance on the engineering of knowledge-based systems. Appointment will be at an appropriate point on the Professorial scale £19,010–£23,385

The School of Information Systems at UEA encompasses the academic disciplines of Accountancy, Computing Science and Economic Systems Engineering. The principal areas of research in Computing Science are at present in database and information systems, graphics and computer-aided design, concurrency and distributed computing, declarative languages and architectures, and mathematical models and algorithms. Common interests with the Accountancy sector include computerised modelling, systems analysis methods and business information systems. There is also close co-operation with the Electronics sector in areas such as computer architecture, the design of microprocessor-based systems and techniques and tools for computer-aided engineering. The School's research activities increasingly involve industrial collaboration, supported in part through the Alvey and Esprit programmes.

Applications, (five copies), giving full particulars of age, qualifications and experience, together with the names and addresses of three persons to whom reference may be made should be lodged with the Registrar and Secretary, University of East Anglia, Norwich, NR4 7TJ (telephone 0603 56161 ext 2208) from whom further particulars may be obtained, not later than 8 May 1986. No forms of application are issued (74899)

University of Newcastle upon Tyne

Department of Economics

LECTURER

Applications are invited for a post of Lecturer in Economics in the Department of Economics commencing 1st October 1986. Applications will be welcomed from candidates in any field of economics, but those with interests in macroeconomics are particularly encouraged to apply.

Salary will be at an appropriate point on the Lecturer/Assistant Lecturer scale £15,700 per annum according to age, qualifications and experience.

Further particulars may be obtained from the Senior Assistant Registrar, Registry, The University, 6 Kensington Terrace, NE1 7RU, upon Tyne NE1 (3 copies) together with the names and addresses of three referees should be lodged not later than 30th April, 1986. (54813) H1

University of Birmingham

Centre for Russian and East European Studies

ESRC RESEARCH FELLOWSHIP IN SOVIET ECONOMIC HISTORY

The person appointed will work with Professor Alec Nove and Dr S.G. Wheatcroft on the Soviet Industrialisation Project, and should have substantial experience in the handling of Soviet historical data.

The appointment is for one year only, from October 1, 1986. Starting salary on Research Fellow 1A scale (£8,020 point 101 £8,020 - £13,790), plus superannuation.

Further details may be obtained from Mr. J. Evans, Senior Division of the Registry, University of Birmingham, PO Box 363, Birmingham B15 2TT, to whom applications (3 copies) including curriculum vitae and names of three referees, should be sent no later than Monday 28 April 1986.

An Equal Opportunities Employer. (91167) H1

Cranfield Institute of Technology

School of Management

RESEARCH ASSISTANTS

Human Resources Research Centre

Cranfield School of Management wish to appoint two Research Assistants within the newly established Human Resources Research Centre. This Centre is part of the Human Resources Group and provides a research service to organisations on the whole field of personnel management.

EEC Influences Project

Initially on a 12 or 18 month contract, the research assistant will be concerned with a project funded by the Institute of Personnel Management and major UK companies researching the impact of EEC influence on the social and employment environment of UK organisations.

Applicants should possess a good first degree in the social sciences and have some research experience. Acceptability to senior management will be important. A knowledge of employment practices within organisations is valuable and some proficiency in a European language is desirable. **Job Ref: 6064K**

Chemical Industries Project

Initially on a 12 month contract, the research assistant will be concerned with a project jointly funded by the Manpower Services Commission and the Chemical Industries Association researching the impact of change on managers in the chemical and pharmaceutical industries.

Applicants (aged 25–35) should possess a good first degree in psychology or social psychology and have some research experience. An interest in helping managers to cope with change and with stress and some knowledge of management development are desirable attributes. **Job Ref: 6062K**

Salary scale for both posts will be within the range £6,865–£9,275 p.a. depending on experience

Application forms and further details available from the Personnel Department, Cranfield Institute of Technology, Cranfield, Bedford MK43 0AL. Tel: Bedford (0234) 750111 ext.3343. Please quote the appropriate reference. (74836)

LOUGHBOROUGH UNIVERSITY OF TECHNOLOGY

LECTURESHIPS

Arising from recent growth in the staff complement of the Department of Computer Studies, applications are invited for the following posts:

Lecturer in Artificial Intelligence

Applicants should have a proven research record in artificial intelligence and experience of the application of knowledge-based techniques. The ability to contribute to a programme of work in the continuous speech recognition or an interest in natural language processing would be advantageous. Ref: 88/13C0.

Lecturer in Software Engineering

Applicants with an established research record able to support existing activities in formal methods, parallel computing or logic programming or who are active in research or have practical experience of the application of software engineering methods are sought. Ref: 86/14C0

Appointments will be on the scale £8,020 to £16,700 (under review 1 April 1986). Requests for further particulars and application forms to Paul Johnson, Establishment Officer.

Applications should be submitted by 8th May 1986.

Loughborough *Leicestershire* (74869)

University of Essex

Department of Computer Science

COMPUTER OFFICER (GRADE 1A)

The Department of Computer Science, with links with United Kingdom Ltd. to provide a course for the teaching of programming in the microprocessor software engineering, is seeking to establish the need for modular, precise problem specification and correctness.

The Department is seeking graduates with substantive experience of computing and to whom the ideas were associated with this course. A good working knowledge of Pascal is essential and experience with the use of more of MODULA-2 is desirable. Personal Computers and Networking would be advantageous.

Appointment will be for two years from July 1986, or as soon as possible thereafter, on Grade 1A (£8,020 - £12,785 on 1986 scale).

Applications (three copies), including a curriculum vitae and the names and addresses of two referees, should be sent to the Registrar (R/399/TRES), University of Essex, Wivenhoe Park, Colchester CO4 3SQ, from whom further particulars may be obtained by telephone (0206 May 1986. (54818) H1

Theological Hall Uniting Church in Australia (Synod of Victoria)

Applications are called for from women and men, lay and ordained, for two appointments within the Theological Hall, Melbourne, Australia.

DEAN

The appointment is to be effective from 1 January, 1987. The appointee will be responsible for the pastoral care of candidates for the ministries of the Uniting Church and supervision of their courses, and will participate in the Uniting Church programme of ministerial formation of candidates. A suitably qualified associate may also contribute to the teaching programme of the Theological Hall.

LECTURER IN NEW TESTAMENT STUDIES

The appointment is to be effective from 1 January, 1988. Following the retirement of Professor Osburn as Professor of New Testament studies and Early Church History. The appointee will teach and conduct research within the Department of Biblical Languages and Literature of the United Faculty of Theology and in ecumenical teaching institution centred in Melbourne and will share generally in the responsibilities of men and women for the ministries of the Uniting Church.

Information regarding the two appointments is available from the Secretary of the Nominating Committee, Theological Hall, Ormond College, Parkville, Victoria, 3052, Australia. Applications should be addressed to the Chairman of the Nominating Committee at the above address. The closing date is 7 May, 1986. (54822) H1

The University of Sheffield

Department of Mineralogy

LECTURESHIP

Applications are invited for a lectureship in the above department tenable from a starting date to be arranged. The successful candidate will be expected to make an active contribution to research, teaching load and administrative and enthusiastic commitment to be given to individuals will have a particular interest in the application of genetic techniques to studies of microbial physiology and who would be prepared to interlink their research with those of Professor J.R. Guest (molecular genetics of bacterial energy generation) and Professor D.W. Tempest (physiology of microbial growth), though candidates with interests in other aspects of microbiology will be considered.

The salary will be on the scale for lecturers, £8,020 to £15,700 per annum according to age, qualifications and experience. Applicants should normally be under 35, have research experience and a Ph.D. in microbiology. It is intended to hold the interviews for the post in June. Candidates who are resident outside the country may be required to come for an interview but should be prepared to give a short seminar (maximum time 30 minutes) on their research.

General enquiries may be directed to Professor R.W. Tompsett, Department of Microbiology, (0742 78555, Ext. 4453). Further particulars are available from the Personnel Department (Academic Staffing), The University, Sheffield S10 2TN to which applications (6 copies) containing details of education, awards, professional experience, a complete list of publications (with page numbers), an outline of present and future research, and the names and addresses of three academic referees should be sent to arrive by 31 May 1986. Please quote ref. R.398/01. (54825) H1

University of Hong Kong

LECTURER IN THE LANGUAGE CENTRE

Applications are invited for a lectureship in the Language Centre. Candidates should have a postgraduate qualification in general/applied linguistics plus speciality in one or more of the following areas: language teaching and learning, language testing, sociolinguistics and bilingualism. The appointee will be expected to develop undergraduate English for Academic Purposes courses and to participate in the Centre's M.A. programme.

Annual salary (superannuable) is on a 11-point scale: HK$160,980 (approx. £14,250 - $69,100 sterling equivalent as at March 19, 1986). Starting salary will depend on qualifications and experience, current rates, salaries tax and income. Housing benefits at a rental of 7.5% of salary, children's education allowance, leave and medical benefits are provided.

Further particulars and application forms may be obtained from the Secretary General, Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF, or from the Appointments Unit, Secretary's Office, University of Hong Kong, Pokfulam Road, Hong Kong.

Closes 25 June 1986. (54818) H1

The University of Auckland New Zealand

Applications are invited for the following posts:

LECTURESHIP IN DEVELOPMENTAL AND ECONOMIC BOTANY

Applicants for this post in the Department of Botany should hold, or be nearing completion of, a Ph.D. Their area of expertise should be in the field of developmental and economic botany. Preference may be given to a person with biochemical interests either in plant growth regulators or in fruit ripening. Closing date: 9 May 1986.

LECTURESHIP IN GEOGRAPHY

Applicants for this post in the Department of Geography should have a higher degree in human geography with a qualification in Surveying. An interest in quantitative techniques in addition to cartography. An interest in another specialist branch of Geography would be an advantage. Closing date: 5 May 1986.

Commencing salary will be established within the range NZ$28,000 - $35,000.

Conditions of Appointment and Method of Application are available from the Registrar (Academic Appointments), University of Auckland, Private Bag, Auckland, New Zealand. Attention: The Secretary General, Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF, or from the Secretary of Appointments Unit, Registrar's Office, University of Surrey, Guildford, GU2 5XH, England. Tel: Guildford (0483) 571281, Ext. 2000. Applications from men and women, including curriculum vitae, including the names and addresses of three referees, should be sent to the same address by Friday 16th May 1986 quoting the reference 492/THES. (91163) H1

University of Exeter

LECTURESHIP IN ACCOUNTANCY

Applications are invited for the above post tenable from 1 September 1986. It is hoped to appoint a lecturer with a special interest in management accounting. Applicants should preferably have a good honours degree in accountancy or other relevant discipline (e.g. computing or statistics) and a professional accountancy qualification.

Commencing salary will be within the range £8,020 to £21,275 p.a. on the scale £8,020 to £15,700 per annum (under review).

Further particulars are available from the Personnel Office, University of Exeter, Exeter EX4 4QJ, to whom applications (6 copies, candidates resident overseas one copy) including the names and addresses of three referees should be sent by 6 May 1986 quoting reference no. 3461. (91168) H1

University of York

CHAIR OF ARCHAEOLOGY

Applications are invited for the Chair of Archaeology which will fall vacant on the retirement of Professor Phillip Rahtz at the end of September this year. The post carries with it the Headship of the Department.

Salary within the Professorial range (currently £19,505) with USS).

Six copies of applications, with full curriculum vitae and naming four referees, should be sent by 16 May 1986 to the Registrar's Office, Department of York, Heslington, York YO1 5DD, from whom further particulars are available. Please quote reference number 79/0581. (91167) H1

The University of Auckland New Zealand

Applications are invited for two posts of Senior Lecturer/Senior Lecturer in Anatomy:

Post A: Applicants should be experienced teachers of gross anatomy. The appointee will be expected to play a major role in the co-ordination and development of the Department's teaching programmes, in gross anatomy, principally for medical and dental students. Applicants should preferably hold a medical qualification but this is not essential. Candidates with expertise in other areas of anatomy may also apply.

Post B: Applicants should have a dental or medical degree and/or postgraduate qualification in Anatomy. As it is hoped that the appointee, in addition to undertaking teaching duties for preclinical students, will participate in coordinating role in courses in dental anatomy which are now in the preclinical and theory parts of the five year dental curriculum suitable experience in teaching would be an advantage.

Both appointees will be expected to have a research commitment with evidence of research achievement in his or her chosen field. The Department has facilities for the prosecution of many areas of anatomical research including Neuroendocrinology, Neuromorphology, Developmental Biology, Human Growth, Embryology and Oral Biology.

Applicants should make clear which post (A or B) they wish to be considered for.

Annual salaries (superannuable) are on the scale: Senior Lecturer: $41,066 - $46,860 (9 points) approx. £22,700 - £25,900; Senior Lecturer: $36,196 (6 points) approx. £20,000 - £25,000 (all equivalent as at March 1, 1986). Actual salary will depend on qualifications and experience. At current rates, 17% of gross income, housing at 7.5% of gross salary, children's education allowance, leave and medical benefits are provided.

Further particulars and application forms may be obtained from the Secretary General, Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF, or from the Appointments Unit, Secretary's Office, University of Hong Kong, Pokfulam Road, Hong Kong.

Closes 25 June 1986. (54818) H1

University of Hong Kong

CHAIR OF LAW

Applications are invited for a Chair of Law in the Department of Law. Candidates with a strong record of research relevant to the teaching of the Department will be expected to apply but the University is particularly anxious to have considerable interest and experience and a record of scholarship who are recognised publicly have a higher degree in law. Consideration will also be given to applications for appointment on secondment from other Universities. Private practice on a basis agreed with the University is permitted.

Annual salary (superannuable) will be within the professorial range and will be between £30,520 and £39,530 (approx. as at March 21, 1986). At current rates, income tax will not exceed 17% of gross income. Housing at 7.5% of salary, children's education allowance, leave and medical benefits are provided.

Further particulars and application forms may be obtained from the Secretary General, Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF, or from the Secretary of Appointments Unit, Secretary's Office, University of Hong Kong, Pokfulam Road, Hong Kong.

Closes 25 June 1986. (54818) H1

University of Hong Kong

READERS/ SENIOR LECTURERS IN ANATOMY

Applications are invited for two posts of Reader/Senior Lecturer in Anatomy:

Post A: Applicants should be experienced teachers of gross anatomy. The appointee will be expected to play a major role in the co-ordination and development of the Department's teaching programmes, in gross anatomy, principally for medical and dental students. Applicants should preferably hold a medical qualification but this is not essential. Candidates with expertise in other areas of anatomy may also apply.

Post B: Applicants should have a dental or medical degree and/or postgraduate qualification in Anatomy. As it is hoped that the appointee, in addition to undertaking teaching duties for preclinical students, will participate in coordinating role in courses in dental anatomy which are now in the preclinical and theory parts of the five year dental curriculum suitable experience in teaching would be an advantage.

Both appointees will be expected to have a research commitment with evidence of research achievement in his or her chosen field. The Department has facilities for the prosecution of many areas of anatomical research including Neuroendocrinology, Neuromorphology, Developmental Biology, Human Growth, Embryology and Oral Biology.

Applicants should make clear which post (A or B) they wish to be considered for.

Annual salaries (superannuable) are on the scale: Reader: $41,066 - $46,860 (9 points) approx. £22,700 - £25,900; Senior Lecturer: $36,196 (6 points) approx. £20,000 - £25,000 (all equivalent as at March 1, 1986). Actual salary will depend on qualifications and experience. At current rates, 17% of gross income, housing at 7.5% of gross salary, children's education allowance, leave and medical benefits are provided.

Further particulars and application forms may be obtained from the Secretary General, Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF, or from the Appointments Unit, Secretary's Office, University of Hong Kong, Pokfulam Road, Hong Kong.

Closes 25 June 1986. (54818) H1

University of Durham

RESEARCH FELLOWSHIPS IN ARTS

The Council of the University of Durham invites applications for a number of Research Fellowships in Arts (excluding Theology, Psychology and Education) tenable from 1 October 1986 or such other date as may be agreed.

The Research Fellowships are administered by the University Research Fellowships Committee. The Research Fellowships are offered to a number of outstanding graduates of any nationality who are of exceptional promise for research in Durham. Successful candidates might be members of the University but not of a College or Society. Fellows will normally be elected to Visiting Fellowships of a Society or College. Fellows will be expected to undertake research in Durham. Successful candidates might be members of the University but not of a College or Society. Fellows will normally be elected to Visiting Fellowships of a Society or College. Fellows will be expected to undertake research in Durham. The Research Fellowships are offered to a number of outstanding graduates of any nationality who are of exceptional promise for

Lecturer II/Senior Lecturer in APPLIED PHYSICS

(Computer Systems & Software Science)
FACULTY OF SCIENCE
School of Applied Physics

Course development and resource investment in the Faculty have closely matched the growing scientific need for computer systems and software design. Applications are invited from persons able to assist in extending this integration of science and technology, and who ideally have recent relevant experience in either applied science or engineering. The School has its own undergraduate and sub-degree programmes and contributes to others in the Faculty. It also provides good opportunities for research and consultancy.

Salary range LII/SL: – £8,754 – £15,723 including London Allowance.

Closing date 12 May 1986
Details and application forms from Personnel Office, Kingston Polytechnic, Penrhyn Road, Kingston upon Thames KT1 2EE. Tel 01-549 1366 ext 505.

KINGSTON POLYTECHNIC

RGIT

ROBERT GORDON'S INSTITUTE OF TECHNOLOGY, ABERDEEN
GRAY'S SCHOOL OF ART

LECTURER

to teach Drawing and Painting. Applicants should be practising artists of distinction with a sound knowledge of drawing and painting. Expertise in other disciplines such as printmaking, video production, film making or computer graphics could be an advantage.

Salary scale (under review): £9321 - £14718 per annum.

Assistance with removal expenses.

Further details from: The Personnel Department, Robert Gordon's Institute of Technology, Schoolhill, ABERDEEN, AB9 1FR. Tel. (0224) 633611 Ext. 249.

Closing date for receipt of applications 23rd May, 1986. (74807)

KINGSTON POLYTECHNIC
FACULTY OF ENGINEERING AND COMPUTING
School of Computing
Principal Lecturer in Computing
Lecturer II/Lecturer in Computing

Applications are invited for the above posts which have arisen in part through the award of £1.2M to the Faculty under the Government's Engineering and Technology Programme, including funding for an expansion of the BSc (Hons) Computer Science degree course. Applicants must be able to provide clear evidence of their ability to contribute to computing/information technology teaching at both undergraduate and postgraduate levels, and to the research/consultancy activities of the School of Computing.

Expertise in any of the specialist areas of computing would be acceptable but applicants who were able to contribute immediately to the School's teaching and research activities in such areas as software engineering, data communications, artificial intelligence, systems analysis and design, image processing and graphics would be particularly welcome.

Salary range: PL £14,991 to £16,287
LII/SL £8,754 to £15,722
Including London Allowances

Application forms and further details from the Personnel Office, Kingston Polytechnic, Penrhyn Road, Kingston upon Thames, KT1 2EE. Tel: 01-549 1366 ext 505.

Closing date: 4 May 1986 (74870)

Plymouth Business School
LECTURER II IN MANPOWER STUDIES

Salary:– £8,076 – £12,945 (normally with further advancement to £16,045)

Applicants should have appropriate academic qualifications and industrial or commercial experience. They should be able to contribute at both undergraduate and postgraduate/post-experience levels in the areas of industrial relations and personnel management. An interest in computer applications to human resource management would be desirable.

Application forms (to be returned by Friday 2 May 1986) and further details may be obtained from the Personnel Officer, Plymouth Polytechnic, Drake Circus, Plymouth. PL4 8AA. Telephone: (0752) 264639. (74852)

Plymouth Polytechnic
Drake Circus, Plymouth
Devon PL4 8AA

Lecturer II/Senior Lecturer in Statistics

FACULTY OF SCIENCE

Applications are invited for the post of LECTURER/SENIOR LECTURER in Statistics in the School of Mathematics. The School is responsible for teaching Mathematics and Statistics throughout the Faculties of Science and Engineering.

Applications from people with strong interests in Statistical Modelling or Applied Statistics will be particularly welcome as the successful applicant will be required to make a substantial contribution to the development of courses in these areas.

Salary range LII/SL: £8,754 – £15,723 including London Allowance.

Applications forms and further details may be obtained from the Personnel Office, Kingston Polytechnic, Penrhyn Road, Kingston upon Thames Tel 01-549 1366 ext 505.

Closing date: 9 May 1986 (74873)

KINGSTON POLYTECHNIC

Flood Hazard Research Centre

Two Research Posts

Three-year appointments contributing to a major research project on the national significance of investment in coast protection and sea defence. The project is funded by the Ministry of Agriculture, Fisheries and Food. Both posts involve work on inter-related projects.

- **Research Fellow**

£8,754 - £13,623pa inc.

A research economist/social scientist is required.

- **Research Assistant**

£6,219- £8,355pa inc.

A survey research specialist/social scientist is required to design and supervise social surveys.

For an informal discussion about these posts, telephone Colin Green, Research Manager, on 01-804 8131 ext. 468. Write enclosing s.a.e. (min. 9in x 4in.) and quoting ref A725B for further details and an application form: Personnel Office, Middlesex Polytechnic, 114 Chase Side, London N14 5PN. Closing date 21 April. (54820) H3

Middlesex Polytechnic

Manchester Polytechnic
Faculty of Art and Design
School of Theatre

LECTURER II IN MOVEMENT

Applications are invited from qualified Movement Specialists to teach on the Polytechnic Diploma in Theatre course for intending actors, currently NCDT accredited. Knowledge of Alexander Technique and the methods of Rudolf Laban/Lis Pilk and some choreographic/dance skills, an advantage. The successful candidate will be expected to contribute to teaching the Acting syllabus and/or directing productions. Previous experience in actor-training and/or profession is looked for.

Salary scale £8,076 - £12,945.

For further details and an application form, returnable by 28th April 1986, send a self-addressed envelope marked 'A/451' to the Secretary, Manchester Polytechnic, All Saints, Manchester M15 6BH.

Department of Mathematics and Physics

1. LECTURER II IN PHYSICS

Applications are invited from suitably qualified graduates with appropriate teaching and industrial or research experience. The successful applicant will be expected to contribute to both the lecturing and research programme within the department. (Ref: 7/785)

2. TEMPORARY LECTURER IN PHYSICS (ONE YEAR)

Due to the secondment of a member of staff in the department a vacancy now exists for a temporary lecturer in Physics. This would be an ideal post for a recent postgraduate to obtain post-graduate experience in Higher Education. (Ref: 7/786)

Salary scale £8,076 - £12,945.

For further particulars and an application form, for above posts, returnable by 25 April 1986, send a self-addressed envelope quoting appropriate reference number to the Secretary, Manchester Polytechnic, All Saints, Manchester M15 6BH.

Manchester Polytechnic is an equal opportunities employer. (54867) H3

Faculty of Science

Lecturer II In Physical Geography

Salary: £8,076–£12,845 (normally with further advancement to £15,046)

Expertise in Quantitative Methods required.

Application forms – to be returned by Friday 25th April 1986 – and further details are available from the Personnel Department, Plymouth Polytechnic, Drake Circus, Plymouth PL4 8AA; Tel (0752) 264639. (74881)

Plymouth Polytechnic
Drake Circus, Plymouth, Devon PL4 8AA

North Staffordshire Polytechnic
Department of History of Art and Design and Complementary Studies

SENIOR LECTURER/ LECTURER IN DESIGN HISTORY

Senior Lecturer £11,958 - £14,046 (bar) - £15,045 Lecturer II £8,076 - £12,945

The successful applicant will be expected to teach on the B.A. (Hons.) History Design and the Visual Arts Degree, as well as contribute to the courses for the B.A. (Hons.) Multi-disciplinary Design Degree.

Application forms and further particulars available from the Personnel Section, North Staffordshire Polytechnic, College Road, Stoke on Trent ST4 2DE or Tel: (0782) 45851. Ext. 311. Closing date for completed applications 30th April 1986. (51901) H3

Middlesex Polytechnic
Microelectronics Centre

RESEARCH ASSISTANTS/ RESEARCH FELLOWS IN MICRO-ELECTRONICS

£6,570 - £13,983 p.a. inc.

Three opportunities to gain valuable industrial experience with the Middlesex Polytechnic Microelectronics Centre, one of the country's leading centres for original research and teaching in microelectronics. Most of the centre's work is funded by Alvey contracts involving a high degree of industrial collaboration.

Silicon-on-Insulator Technology.

Three-year contract (ref VSLI 027).

An Alvey contract for the study of buried insulator structures formed by high dose implantation of oxygen and nitrogen. The work mainly involves the investigation of silicon-insulator interfaces.

MOS Gate Dielectrics.

Three-year contract (ref VSLI 004).

An Alvey contract for the investigation of silicon oxynitrides as a material for MOS gate dielectrics, studying the preparation of the layers and their physical and electrical characterisation.

Wafer Scale Integration.

Two and a half-years contract (ref ALVI 073).

The centre is involved with design and fabrication aspects of WSI. This post is concerned with a study of potential problems in the production of whole wafer devices.

Good graduate or post-graduate qualifications are expected. The level of appointment will be appropriate to qualifications and experience. Opportunities exist for project leadership responsibility for those with suitable experience.

Write including s.a.e. (min. 9in. x 4in.) and quoting ref A724B for further details and an application form: Personnel Office, Middlesex Polytechnic, 114 Chase Side, London N14 5PN. Closing date 21 April. (54820) H3

North Staffordshire Polytechnic
Careers in Management Education

INFORMATION TECHNOLOGY FINANCE OPERATIONS MANAGEMENT SENIOR LECTURERS /LECTURERS II

Salary £8,076 - £15,045

Vacancies exist for persons with recent management experience and/or a good research record to lecture on post-experience/post-graduate management courses and to help develop higher degree programmes for practising managers.

Permanent and Temporary Posts

Department of Management Studies/West Midlands Regional Management Centre

For further details apply Personnel Section, North Staffordshire Polytechnic, College Road, Stoke on Trent, ST4 2DE. Tel: (0782) 45851 Ext. 311. Closing date for completed applications 25th April 1986. (51196) H3

Trent Polytechnic
Department of Physics

LECTURER/ SENIOR LECTURER IN PHYSICS

(Ref 5043)

(£8,076–£15,045 per annum)

Applicants for both posts should be able to teach honours degree courses and participate in the research projects within the Department.

It is anticipated that the successful candidate for the post in Physics will have an interest in the solid state. Applicants for the post in Science Education should be qualified teachers and have knowledge of the problems of communities in the Midlands and practice of chemistry, physical sciences.

Closing date 24 April 1986.

Department of Education

LECTURER/ SENIOR LECTURER POSTS IN TEACHER EDUCATION

£8,076–£15,045 pa

The current expansion of the Polytechnic's provision of initial and in-service teacher education has led to the establishment of five new posts. Recent, relevant, extensive and successful experience of teaching essential, together with involvement in curriculum development and innovation appropriate first degree and further study normally leading to a higher degree is likely.

Applications are sought in the following areas:–
Early Childhood Education (Post Ref 8068)
Primary Mathematics (Post Ref 8067)
Primary Science (Post Ref 8069)
Secondary Craft, Design & Technology (Post Ref 8070)
Secondary/F. E. Business Studies (Post Ref 8071)

Please quote the Post Ref No. of the vacancy for which you wish to apply.

Closing date 25 April 1986.

For all posts further details and forms of application are available from the Staff Officer, Trent Polytechnic, Burton Street, Nottingham NG1 4BU.

Scholarships

University of Leicester

OPEN RESEARCH SCHOLARSHIP

Applications are invited for the University's Open Research Scholarship tenable for up to 3 years from 1 October 1986.

The Open Research Scholarship is tenable in any of the University's departments and carries an annual maintenance award of £5,665 (under review) plus remission of fees (£670 in 1986/87). The successful candidate will be expected to register for a research degree within the University.

Further details and application forms are available from the Registrar (Open Research Scholarship), University of Leicester, University Road, Leicester LE1 7RH, to whom applications should be returned by 9 May 1986. (54833) H3

Colleges and Departments of Art

DARTINGTON COLLEGE OF ARTS
Department of Music
LECTURER IN MUSIC (LECTURER II).

Applications are invited from suitable qualified candidates to join the 12 F.T. lecturers in this lively music department, with effect from 1 September, 1986. We are looking for a person to contribute to the teaching of our Preparatory and B.A. (Hons) degree courses, and to the general practical activities of the department. Candidates should offer a fresh approach to areas such as analytical and historical studies and techniques of composition, and participate positively in a department of wide-ranging and intercultural activities. Keyboard or conducting ability, or expertise in twentieth century music, would be an advantage.

Dartington is an Equal Opportunities Employer

For further details, please send large SAE to:
Dartington College of Arts, Totnes, Devon, TQ9 6EJ. (74824)

Industry and Commerce

TRAINER REQUIRED

FOR OUR AWARD WINNING 21 Week SOFTWARE DOCUMENTATION TECHNICAL AUTHORSHIP COURSE

Due to the expansion of our training department and some very new and exciting developments we require a trainer in Derby. He/She should possess intimate knowledge of Computing, particularly in the software area, and have a knowledge of programming in Basic & Pascal. In depth knowledge of communicating techniques or technical authorship is not necessary. Please send your application with a full C.V. to:

Mr. Gordon Roberts
Easton Limited
Norman House, Heritage Gate
Friargate
Derby DE1 1DD (74878)

Colleges of Further Education

Nene College Northampton

FACULTY OF MATHEMATICS, MANAGEMENT & BUSINESS

Applications are invited for the following posts:

LECTURER 2 IN BANKING & FINANCE

The person appointed should be a member of the Institute of Bankers and have practical banking experience. A degree or/and accountancy qualification would be an advantage, as would an ability to contribute towards accountancy teaching.

LECTURER 2 IN MANAGEMENT STUDIES

The person appointed should be able to offer either Marketing or Personnel Management as a specialism, but also be able to contribute to general management & business teaching. Applicants should have commercial/industrial experience and a degree and/or relevant professional qualification.

Salary scale – Lecturer 2 = £8,076 x 10 increments to £12,945 with possible progression through to Senior Lecturer scale.

PROGRAMME DIRECTOR – MANAGEMENT TRAINING

The person appointed will join a team of trainers concerned with the promotion and provision of short management courses largely for industry and commerce within the Northampton region. Applicants must have industrial/commercial experience together with a successful record in management training.

Salary scale £11,958 x six increments to £15,045.

For further details and application forms send SAE (stating the post(s) in which you are interested) to The Dean, Faculty of Mathematics, Management & Business, Nene College, Moulton Park, Northampton NN2 7AL.

Closing date for applications is two weeks from the appearance of this advertisement. (74895)

HAMPSHIRE

EDUCATION COMMITTEE
PORTSMOUTH COLLEGE OF ART, DESIGN AND FURTHER EDUCATION

Vice Principal

Applications are invited for the above post which has become vacant due to retirement.

Application forms and full particulars, which must be returned by Thursday, 24th April 1986 may be obtained from The County Education Officer, The Castle, Winchester, Hants, SO23 8UG or telephone Winchester 54411 Ext: 476 quoting the reference FE/STAFF/MS. (74868)

Colleges and Institutes of Technology

SURREY COUNTY COUNCIL

NORTH EAST SURREY COLLEGE OF TECHNOLOGY (GROUP 8)

VICE PRINCIPAL

Salary range £21,618 – £22,533 plus £264 London Fringe Allowance.

Following the appointment of the present Vice-Principal to the post of Principal, applications are invited, from suitably qualified and experienced candidates, for a successor to his post.

The College provides a broad range of both advanced and non-advanced courses in the fields of Biology, Social Sciences, Business Studies, Construction Studies, Applied Sciences, Management and General Studies. The College has close links with industry, commerce and the professions and has had a long association with the Manpower Services Commission.

Further details and application forms available from County Education Office (PE/MED), County Hall, Kingston upon Thames, Surrey KT1 2DJ, (SAE please). Closing date 29 April 1986. (74869)

WELSH COLLEGE OF HORTICULTURE, NORTHOP

Principal

Applications are invited for the above post which becomes vacant on 1st January, 1987 on the retirement of Mr. C.J. Mitchelmore. Candidates should possess a degree (or equivalent) in horticulture and have had appropriate experience in education and in the horticulture industry.

This is a residential college on an estate of 92 hectares overlooking the estuary of the River Dee. It offers a range of three, two and one year diploma and certificate courses in the major branches of horticulture. There are over 500 students of whom some 180 are full-time

Salary: Principal's Range Points 7-11 (£18,507 – £20,385)

The Principal's House (rent and rates free) is situated on the estate.

Further details and application forms are obtainable from the Director of Education (Ref. DR/FE) Shire Hall, Mold, Clwyd. CH7 6ND (Telephone [0352] 2121 Ext. 2519). Closing date *30th April, 1986*

Shire Hall *KEITH EVANS*
MOLD *Director of Education*
(74884)

CLWYD COUNTY COUNCIL

LONDON BOROUGH OF EALING
Southall College of Technology

Sector Manager for Business Computing and Community Education

Salary: Burnham Head of Department Grade V £18,264 – £20,166 inclusive of London allowance.

Applications are invited for this new post effective from 1 September 1986.

Applicants must be graduates with proven administrative and organising ability in further or higher education. Relevant industrial/commercial experience will be a requirement, but personal commitment and an ability to communicate effectively with college staff and outside agencies, whether industrial/commercial or local community based, will be essential.

Further particulars and application forms obtainable from J McTear, BA, Clerk to the Governing Body, Southall College of Technology, Beaconsfield Road, Southall Middx UB1 1DP. Telephone 01-574 3448 extension 202. Closing date 25 April 1986. (74872)

Adult Education

ASSISTANT DIRECTOR/ FIELD CONSULTANT

After eight years, Elspeth Cardy is leaving ALBSU and we are seeking to recruit her successor, to join our small London based team.

Candidates should have substantial experience in adult literacy, numeracy or related basic communication skills work with adults as well as enthusiasm and commitment to the general development of basic education in England and Wales.

ALBSU is the central focus for adult literacy and related basic skills work in England and Wales and is grant aided by the Department of Education and Science and the Welsh Office Education Department. Among its functions, ALBSU sponsors a significant number of development projects, co-ordinates and provides training, produces and publishes materials and offers a consultancy and advisory service to LEAs and voluntary organisations.

ALBSU staff are based in London, although a considerable amount of travelling throughout England and Wales is essential. The commencing salary will be between £17,265 and £18,472 on the National Joint Council Scales plus £1,317 London Weighting Allowance.

Further details and application forms may be obtained from:

The Director, Adult Literacy and Basic Skills Unit,
Kingsbourne House, 229/231 High Holborn,
London WC1V 7DA. Telephone: 01-405 4017

Closing date for applications is *April 30, 1986.*

ALBSU
Adult Literacy & Basic Skills Unit

Colleges and Institutes of Higher Education

BEDFORD COLLEGE of higher education

Applications are invited for the following posts, all available from 1.9.86:

PL	COMPUTER MANAGER
PL	PRIMARY EDUCATION: to lead the Primary B.Ed. and coordinate the area, establishing close links with schools
PL	STUDENT SERVICES COORDINATOR : to be in charge of counselling, student residence and liason with the student body
PL	ADULT AND CONTINUING EDUCATION
SL	RECREATION AND LEISURE STUDIES : to play a developmental role within B.A. Sports Studies
SL	PHYSICAL EDUCATION : to provide leadership in P.E. within the B.Ed., and participate in prof. studies teaching
2 L2/SLs	INFANT EDUCATION : recent and substantial experience of teaching infants is sought for 2 posts within the Primary B.Ed.
2 L2s	ELECTRONICS
L2	PHYSICAL EDUCATION IN FURTHER EDUCATION
L2	OFFICE AND SECRETARIAL SKILLS
L2	BUSINESS STUDIES (Accounting)
L2 or L1	MATHEMATICS
2 L1s	ELECTRONICS
Temporary L1	OUTDOOR EDUCATION : to work with B.A. and B.Ed. students for 1 year to replace a member of staff on secondment

Further details and application forms can be obtained from Director's secretary Bedford College of Higher Education, Mander site, Cauldwell Street, Bedford MK42 9AH (tel. Bedford 45151) to whom they should be returned by 28th April 1986.

Bedfordshire is an Equal Opportunities Employer.

LA SAINTE UNION COLLEGE OF HIGHER EDUCATION

Lecturer II/Senior Lecturer in Computing

Required to continue the development of the contribution of micro-computers in primary education. The person appointed will teach on the BEd, PGCE and in-Service Education programmes. The successful candidates will have good academic qualifications in computing and be a qualified teacher.

Lecturer II/Senior Lecturer in Education

Applications are invited from well qualified teachers with recent experience in primary schools, preferably with infant school children.

The person appointed will join the team of staff working on BEd, PGCE and In-Service Education programmes.

Lecturer II/Senior Lecturer in Language and Reading

Applications are invited from well qualified teachers with recent experience in primary schools, preferably with infant school children.

The person appointed will join the team of staff working on BEd, PGCE and in-Service Education programmes.

All of the above are 3 YEAR FIXED TERM APPOINTMENTS FROM SEPTEMBER 1986 and further details may be obtained from the Principal's Secretary, LSU College of Higher Education, The Avenue, Southampton SO9 5HB. Telephone (0703) 228761.

Closing date for applications 1 May 1986. (74868)

Colleges and Institutes of Higher Education continued

Lecturer/Staff Development Officer

£10,950 – £11,604

This is a joint appointment with the College of St Mark and St John, Derriford, Plymouth and West Devon Social Service. This new and innovative post offers the opportunity for a graduate with relevant professional qualifications and experience in social work to teach part-time on the certificate in Social Service South West Peninsular Scheme, and also to work on service development within the Social Services Department in its West Area. The capacity to contribute at the College to a CSS standard unit on disability and a special unit on management will be required with possibilities of contributing to other college courses.

Major changes are planned in the residential and day care services for the elderly and handicapped in West Devon including the introduction of "Community Care Centres". This will challenge existing staff roles and care practices. You will work with individual homes and centres to help staff develop with these changes. For informal discussion please telephone Veronica Dey at the College, telephone Plymouth 777188, or Peter Thistlethwaite at Social Services Area HQ on Plymouth 264626.

Application form (SAE please) and further details from Social Services Department, Civic Centre, Royal Parade, Plymouth. Returnable by 25 April 1986.

(74601)

DEVON

ESSEX

INSTITUTE OF HIGHER EDUCATION
School of Construction Practice

LECTURERS GRADE I in Construction

Salary: £6,324 – £12,945 per annum
Duties to commence 1st September 1986

Applications are invited for two posts from suitably qualified persons. The successful applicants will complete the team for the B.T.E.C. Diploma and Certificate Programmes in Building.

Post 1

to teach and develop Building Measurement with an ability to assist with Construction Technology or Building Science.

Post 2

to teach and develop Land Surveying and assist with Building Science or Construction Technology.

This post is suited to applicants with experience and qualifications in Civil Engineering.

For further details and application forms for the above posts apply to the Personnel Officer, Essex Institute of Higher Education, Victoria Road South, Chelmsford, Essex. CM1 1LL or telephone Chelmsford (0245) 354491. Closing date 2nd May 1986.

(74604)

Kent County Council — Education Committee

Mid-Kent College of Higher and Further Education

DEPARTMENT OF MECHANICAL AND PRODUCTION ENGINEERING

Senior Lecturer

A graduate is required to join an enthusiastic team that has established regional status in Computer Aided Engineering and Open Access Learning for Adult Updating and Retraining.

Candidates will be required to contribute to normal teaching programmes and become actively involved in new developments.

Salary Scale £11,958–£14,045 (bar) £15,045

Further details and application form available from the Principal, Mid-Kent College of Higher and Further Education, Horsted, Maidstone Road, Chatham, Kent to whom completed applications should be returned by Friday 25th April 1986. (Tel: 0634 41001, Ext. 240).

(74892)

BULSMERSHE COLLEGE OF HIGHER EDUCATION

Applications are invited for three one-year temporary posts from September 1986

LECTURER II/SENIOR LECTURER IN DRAMA

A full-time appointment to teach mainly within the College's primary BEd programme. Strong academic qualifications in Drama, experience of Theatre-In-Education and of teaching Drama in schools are essential.

LECTURER II/SENIOR LECTURER IN FILM [PART-TIME]

A 0.5 appointment to teach mainly within the College's BA programme. Strong academic qualifications in Film are required. Interests in European Cinema and in feminist approaches to Film particularly welcome.

LECTURER II/SENIOR LECTURER IN ART [PART-TIME]

A 0.5 appointment to contribute to initial teacher training programmes. Strong academic qualifications in Art and Design and recent teaching experience with Junior children are essential.

Further particulars and application forms may be obtained from:
Acting Deputy Principal
Bulmershe College of Higher Education
Woodlands Avenue
Earley Reading RG6 1HY
Tel: Reading (0734) 883387 Ext 226
Completed forms to be returned by 2 MAY 1986
Berkshire County Council is an equal opportunity employer

(74841)

the College of Ripon & York St John

Applications are invited for the following post in this Church of England Voluntary College of Higher Education (1,800 men and women).

DEPARTMENT OF DESIGN AND TECHNOLOGY
(Lecturer Grade II/Senior Lecturer scale £8,076 – £15,045

Applications are invited from well qualified and experienced persons to join this expanding department in the College. Recent secondary school/teacher training experience is required together with a broad view of technological problem solving in the context of Craft, Design and Technology and the ability to organise publicity and recruitment to courses.

Further details and application forms may be obtained from the Principal, College of Ripon and York St. John, Lord Mayor's Walk, York YO3 7EX to whom completed forms should be returned to arrive not later than TUESDAY 6th MAY 1986.

(74848)

DERBYSHIRE COLLEGE OF HIGHER EDUCATION

(Faculty of Engineering & Science) 'New Blood' Appointments

2 posts of
Lecturer II/Senior Lecturer in Mechanical Engineering

Applications are invited for the above posts from energetic enthusiasts who wish to teach their specialised subject at degree and sub-degree level.

An active research interest and appropriate industrial experience are required.

Salary scales: Lecturer II £8,076–£12,945
Senior Lecturer £11,958–£14,046–£15,045

Application forms and further particulars from Staffing Officer, Derbyshire College of Higher Education, Kedleston Road, Derby DE3 1GB, telephone Derby 47181, extension 8.

SOUTH GLAMORGAN COUNTY COUNCIL
SOUTH GLAMORGAN INSTITUTE OF HIGHER EDUCATION (CARDIFF)

HEAD OF DEPARTMENT OF SOCIAL WORK, GRADE 4
POST NO. HOD4/85

Due to the retirement of the present postholder, applications are invited from graduates or equivalent for the above appointment to commence duties on 1 September 1986. The Department has a variety of courses and potential for further development in post qualification studies and other professional activities.

Previous management experience in education and/or social work is desirable.

SALARY SCALE: HOD4 £18,804 – £17,739

Further particulars and application forms may be obtained from The Personnel Officer, South Glamorgan Institute of Higher Education, Cyncoed Centre, Cyncoed Road, Cardiff CF2 6XD; Telephone: Cardiff (0222) 551111, Extension 5382. Completed application forms should be returned within fourteen days of the publication of this advertisement.

Applications are welcomed from suitably qualified people regardless of their sex, marital status, race, religion, colour or disability.

(74857)

ST MARY'S COLLEGE
Strawberry Hill, Twickenham

St Mary's is a Roman Catholic college of higher education and offers undergraduate courses leading to two-subject BA, BEd and BSc honours degrees of the University of Surrey, as well as a variety of postgraduate courses. The College has about 1200 students of whom approximately half are registered for BA/BSc degrees and half for the BEd degree.

LECTURER (LII/SL) in MOVEMENT STUDIES

Applications are invited from well-qualified graduates to teach and develop undergraduate and postgraduate courses in one or more of the following areas: Dance, Exercise Physiology, Sociology Aspects, Historical and Comparative Aspects.

The ability to contribute to practical areas and substantial, non-teaching in schools and/or experience of industry and commerce would be advantageous but lack in these respects should not discourage particularly well-qualified graduates in other required disciplines.

Appointment from September 1986.

Closing date for receipt of applications: Friday 25 April 1986

Further details from: The Principal
St Mary's College
Strawberry Hill
Twickenham TW1 4SX

(74836)

Roehampton Institute

Digby Stuart · Froebel · Southlands · Whitelands

Courses offered by the Institute lead to first and higher degrees of the University of Surrey and to other awards. The Institute seeks to make the following appointment with effect from 1 September 1986.

LECTURESHIP IN RELIGIOUS STUDIES

Applications are invited from persons with a higher degree in Religious Studies or Theology combined with recent experience of teaching Religious Education in primary/secondary schools. Some experience of teacher education and appropriate research interests would be an advantage. Teaching responsibilities will also include courses in the BA/BSc programme of Religious Studies. Salary (LII/SL) £8,079–£15,045 plus London Allowance £1,038 per annum.

For an application form and further particulars please WRITE to the Assistant Secretary, Roehampton Institute of Higher Education, Senate House, Roehampton Lane, London SW15 5PU. Closing date Wednesday 30 April 1986. Roehampton Institute is an equal opportunity employer.

(74842)

DORSET INSTITUTE OF HIGHER EDUCATION
DEPARTMENT OF BUSINESS MANAGEMENT

Applications are sought for the following posts which have arisen from expansion of the Departments work.

Post No. E.4681
Division of Operations Management
– L11/SL in Operations Management
with an emphasis on quantitative business analysis and IT applications in business.

Post No. E.4682
Division of Marketing and Business policy
– L11/SL in Business Management

Salary range: £8,076 – £15,045
Closing date: 25th April 1986
Starting date: 1st September 1986
Further details and application forms from: Staffing Officer, Dorset Institute of Higher Education, Wallisdown Road, Wallisdown, Poole, Dorset BH12 5BB

(74837)

BUCKINGHAMSHIRE COLLEGE

School of Art and Design, Furniture and Timber
Head of School: Ian M. Barker BA Cert Ed

2 Posts: Lecturer Grade I Furniture Craft

£6,324 – £11,247

To be appointed from 1st September 1986 to teach students on CG 555/586 Furniture Craft and Woodmachining Courses.

Application forms and further details from:-
The Deputy Director (Resources)
Buckinghamshire College of Higher Education
Queen Alexandra Road, High Wycombe, Bucks.
(Please enclose s.a.e.).

(74827)

Colleges of Higher Education continued

EALING COLLEGE OF HIGHER EDUCATION

Applications invited for the post of

ASSISTANT DIRECTOR

With responsibility for academic staffing, student services and aspects of College liaison.

Salary: Group 8 Vice Principal
£23,067 p.a. inclusive
(Salary review pending)

Full details from The Personnel Office, Ealing College of Higher Education, St Mary's Road, Ealing, London W5 5RF.

Closing date for applications: 28th April 1986.

(74608)

LONDON ECHE Ealing College of Higher Education

DERBYSHIRE COLLEGE OF HIGHER EDUCATION

Lecturer II/ Senior Lecturer in Fashion Design

(1 Full-time & 1 Half-time post)

Salary Scales:
Senior Lecturer £11,958–£14,046–£15,045
Lecturer II £8,076–£12,945

Application forms and further particulars for each post from the Staffing Officer, Derbyshire College of Higher Education, Kedleston Road, Derby DE3 1GB, telephone Derby 47181, extension 8.

(74840)

Canterbury Christ Church College of Higher Education

For September 1986:

TWO POSTS IN PRIMARY EDUCATION

Applicants should have recent experience in Nursery or Primary schools and a higher degree in an area relevant to the Primary curriculum.

Ability to offer LANGUAGE and/or ART as a major curriculum strength is sought as well as the ability to contribute to courses in Child Development and Teaching and Learning. Experience of multicultural education, special educational needs or integration technology in the classroom would be an added advantage.

Salary scale: Lecturer II/ Senior Lecturer £7,929 – £14,763 pa.

For further details write to Principal's secretary, Christ Church College, North Holmes Road, Canterbury, Kent, CT1 1QU, to whom applications should be sent not later than 21 April 1986.

HS

Luton College of Higher Education
Park Square
Luton LU1 3JU

LECTURER II/ SENIOR LECTURER IN APPLIED PLANT PHYSIOLOGY

The person appointed will be expected to make a major contribution towards the C.N.A.A. and H.N.D. Applied Biology and Computing courses, particularly in crop physiology and have the ability to contribute in the area of plant pathology.

The successful candidate will be expected to have an established research record and to develop it further after appointment.

The post will be available from 1st September 1986.

Details and Application Form from Assistant Director, LCHE, Putteridge Bury, Hitchin Road, Luton LU2 8LE (Tel: (0582) 34111, Ext. 5091), to whom forms should be returned by 25th April 1986.

(Beds. C.C. is an Equal Opportunities Employer) (01788)

HS

Hampshire County Council Southampton Institute of Higher Education

Department of Construction and Surveying

LECTURER IN CONSTRUCTION MANAGEMENT LECTURER IN SURVEYING

Applications are invited from suitably qualified candidates who have relevant experience for the above two posts. The persons appointed will be required to teach at advanced level on R.I.C.S. and C.I.O.B. professional courses and to be closely involved with the development of a part-time C.N.A.A. degree in Surveying.

Applicants should be corporate members of an appropriate professional body. Teaching experience would be an advantage although this is not essential. In addition, for the post in Construction Management, applicants should have had managerial experience within the Construction Industry. For the post in Surveying, preference will be given to applicants with experience in either Quantity Surveying or Building Surveying although applicants with experience in Valuations will also be given consideration.

Salary Scale LII £8,076 – £13,845. On the current level of work it is expected that both posts would progress to the Senior Lecturer scale.

Further details and an application form are available from the Personnel Officer, Southampton Institute of Higher Education, East Park Terrace, Southampton, Hants. SO9 4WW. Tel: (0703) 229381, Ext. 312.

Closing date: 25 April 1986. (54826)

HS

West Sussex Institute of Higher Education Incorporating Bishop Otter College Chichester and Bognor Regis College

Applications are invited from qualified and experienced teachers with recent experience for posts in school science for primary initial teacher training and in-service education of teachers with effect from 1st September, 1986. The specific areas of interest are in teaching studies in the 5–8 age range, and in the Primary School and Mathematics in Primary or Secondary School. The appointment will be for 3-years in the first instance or in certain circumstances may be permanent.

The salary will be on the Burnham F.E. L.II scale or S.L. scale (£8,076 – £15,045 per annum) according to experience. The Institute subscribes to a policy of racial equality in its employment practices.

Further details of the Institute and application forms are obtainable from the Director's Secretary, West Sussex Institute of Higher Education, The Dome, Bognor Regis, West Sussex PO21 1HR. Tel: Bognor Regis (0243) 865381, to whom they should be returned by 1st May, 1986. (54830) HS

REMINDER

Copy for Classified Advertisements in the **THES** should arrive not later than 10 a.m. Monday preceding publication

Research and Studentships

The University of Western Australia
Perth

University Research Fellowships (Postdoctoral)

Up to two Research Fellowships will be offered, to be taken up in the latter half of 1986. Appointment will normally be for two years in the first instance. Fellowships may be renewed for a third year, but only in competition with new applicants. Fellows who are appointed for two years in the first instance shall be required to join the Superannuation Scheme for Australian Universities (SSAU). The Fellowships will be tenable in the following academic departments for work in the broad areas stated below

Obstetrics & Gynaecology
Control of ovarian function at a cellular level during luteal phase of patients treated by in vitro fertilization

Physics
Atomic Physics

Psychology
Cognitive Psychology: processing consequences of different writing systems

The Fellowships are intended for younger, accomplished research workers who have held a PhD or equivalent qualification for not more than five years and who by publication and in other ways have demonstrated significant research capability. They are not normally available to immediate PhD graduates of the University of Western Australia

Commencing salary will be within the range of $A23,473–$A26,889 per annum. The removal allowance for an appointee from outside Australia is currently a maximum of $A4,887.

Applications, in duplicate, setting out full personal particulars, qualifications and relevant experience, should reach the Staffing Officer, University of Western Australia, Nedlands, Western Australia, 6009, by 12th May, 1986. Copies of the principles governing University Research Fellowships are available from the Staffing Officer, or from the Secretary General, Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H 0PF. Applicants should arrange for the referees to write to the Staffing Officer before the closing date.

(74055)

University of Bradford

RESEARCH ASSISTANT
Reinforced Reaction Injection Moulding

Applications are invited from Engineering or Physics graduates with good Honours degrees for a three-year fixed-term post to work with a progressive interdisciplinary team on reinforced reaction injection moulding (RRIM) polymer processing techniques using our unique, computer-controlled equipment. Excellent opportunities for industrially relevant research. Opportunity to register for a higher degree

Salary on the scale £7,055 to £9,495 p.a.

Application forms and further particulars available from the Deputy Secretary, (Ref: RA/ME/PDC/TH), University of Bradford, West Yorkshire BD7 1DP, informal enquiries to Dr P. O. Coates, School of Mechanical Engineering, (Tel: 0274 733466, Ext. 634) An Equal Opportunity Employer.

(74688)

UNIVERSITY OF KENT AT CANTERBURY

Doctoral Programme in Applied Computing (Social Sciences)

Applications are invited for two ESRC-funded postgraduate research studentships for a three year Doctoral Programme in Applied Computing (Social Sciences), leading to the award of PhD.

Candidates should have some experience in both computing and a social science discipline.

Further information and application forms may be obtained from:

The Graduate Office, The Registry, The University, Canterbury, Kent. CT2 7NZ. Please quote reference no. POS/86/THES

University of Aberdeen

POSTDOCTORAL RESEARCH FELLOW

Applications are invited for this SERC-funded post, tenable up to a maximum of 2 years and to start as soon as possible. The project is concerned with the kinetics of structural relaxation in polymer glasses, and will involve differential scanning calorimetry, dilatometry and computer modelling. Candidates should preferably have experience in the use of DSC.

Salary £8,020 – £9,000 within the Range 1A Scale for Research and Analogous Staff.

Further particulars and application forms The Secretary, The University, Aberdeen AB9 2TX, with whom applications (2 copies) should be lodged by 2 May 1986 (Ref No EL/031). (54809) H13

University of Edinburgh and University of Cambridge

Natural Language and Planning

RESEARCH ASSOCIATES

Applications are invited for two Research Associateships (Fellow posts as laid out in the Rothwell Report) in a three-year Alvey-supported project involving the Departments of Artificial Intelligence (Edinburgh), the Computer Laboratory (Cambridge) and British Telecom. The project is led by Dr. J.C. Ritchie and Dr A. Tate (Edinburgh) and Dr S. G. Pulman (Cambridge), and is aimed at developing and implementing an English language front-end to an intelligent planning system.

Applicants should have a Ph.D. or comparable experience in an appropriate area, such as artificial intelligence, linguistics, computer science or mathematics.

One post will be based in Edinburgh, the other in Cambridge.

Salaries will be on the Research Associate scale 1A with initial placement within the range £8,076 – £14,475 per annum, depending on one's qualifications and experience.

Starting date will be 1 October 1986 or as soon thereafter as possible.

Further particulars may be obtained from: Mr Fiona Gordon, Department of Artificial Intelligence, University of Edinburgh, 5 Forrest Hill, Edinburgh EH1 2QL, quoting reference number 5337.

Closing date for applications is 1 May 1986. (54845) H12

University of Salford

Department of Applied Acoustics

RESEARCH ASSISTANT

Required to take a leading part in investigating the thermal insulation and fire performance of large-scale building elements under controlled environmental conditions. Applicants should be graduates in science or engineering with an interest in experimental methods, computing and instrumentation techniques.

The Research Assistant will set up the instrumentation and data logging for the newly commissioned 9 m³ test facility, be expected to help develop computer programmes for the acquisition and analysis of large quantities of data, in addition the Research Assistant will be required to help with measurements associated with the research programme of the thermal group.

The appointment is for two years starting as soon as possible after 1 July 1986.

Commencing salary in range £7,055 – £8,030 a year, USS Benefits.

Application forms available from the Registrar, University of Salford, M5 4WT. Tel 061-736 5843, Ext. 2151 to whom completed applications should be returned by 1 May 1986 quoting reference AAC/RIES. Enquiries may also be made to Mr. D. O'Connor (Ext. 4451; 0948321) H12

Brunel University

RESEARCH ASSISTANT

Physics Department

Applications are invited for the above post, for research into the Non-contact monitoring of wear in underwater offshore structures by ultrasonic backscatter. Candidates should have a good first degree in Physics and postgraduate research experience to at least M.Sc. level in Ultrasonics and Nondestructive Testing.

Starting salary up to £9,802 inclusive of London Allowance, depending upon age and experience, with USS benefits. The appointment is for one year initially, with the possibility of a further year's renewal.

Application forms may be obtained from the Personnel Secretary, Brunel University, Uxbridge, Middlesex, UB8 3PH. Closing date 25 April 1986. (54859) H12

Librarians

CAMBRIDGE UNIVERSITY LIBRARY

DEPUTY LIBRARIAN

Applications are invited for the office of Deputy Librarian, which will become vacant on 1 October 1986 following the appointment of Mr R.P. Carr to the Librarianship of the University of Leeds.

Prospective candidates, who should be good honours graduates with wide experience in academic librarianship, may obtain further particulars from the Librarian, Cambridge University Library, West Road, Cambridge CB3 9DR, to whom applications (with the names of three referees) should be returned within four weeks of the date of this advertisement.

The salary of the Deputy Librarian is £20,470 p.a.

nera

NATIONAL ECONOMIC RESEARCH ASSOCIATES
ECONOMIC CONSULTANTS
A MARSH & McLENNAN COMPANY

(74609)

NERA is a leading international firm of economic consultants, which has over 175 professional economists applying micro-economic analysis in a wide range of consultancy assignments for private and public sector clients.

Our London office, which serves UK and overseas clients, is expanding and we are recruiting at research assistant level.

APPLIED ECONOMICS: — LIBRARIAN/ RESEARCH ASSISTANT

We are looking for someone to join our professional staff who has experience or demonstrable aptitude for work which will involve

1. Obtaining and helping to analyse economic and statistical data
2. Maintaining in good order the library of reports and publications
3. Guiding research staff in the use of information sources

Professional qualifications as a librarian and academic qualifications in economics and/or statistics would be valuable.

Salary will be competitive, and working conditions are good.

Please telephone (01 629 6787) if you would like more information about NERA. Applications should be sent to Dermot Glynn, Managing Director, 18 Park Street, London W1Y 3WD.

Administration

Southern Regional Council for Further Education

There is a vacancy for the third (for post of

ASSISTANT SECRETARY

The Assistant Secretary will report directly to the Secretary of the Regional Council and responsibilities will include the operation of various committees and the administration and professional contribution to other regional activities.

This challenging post will provide an opportunity to the successful candidate to further a career in the administration of further and higher education.

Candidates should have a degree or professional qualification preferably with experience in teaching and administration.

The salary range is from £13,617 - £14,976 per annum and the post is superannuable - the conditions of Local Government Regulations will apply.

Application forms and further particulars from the Secretary, The Southern Regional Council for Further Education, 26 Bath Road, Reading RG1 6NT. (54810) H15

PLEASE MENTION THE T.H.E.S. WHEN REPLYING TO ADVERTISEMENTS

Administration continued

EDUCATION OFFICER
(District Nurse Education and Training)

To be based at either York or London

We are seeking to appoint an Education Officer (District Nurse Education and Training) to be responsible for advising and formally visiting institutions approved to conduct courses in District Nurse Education and Training in a given geographical area.

The successful candidate must hold a qualification recordable with the UKCC as a District Nurse Tutor and have had experience in a senior position in an institution conducting courses leading to the District Nurse qualification.

Basic Salary: Whitley Council Administrative and Clerical Staffs Scale 24: £13,210–£16,745 p.a.

An opportunity to discuss this post can be arranged by contacting Miss B Robottom (Professional Officer – District Nurse Education and Training) – telephone 01-388 3131, extension 175.

Further details and application form from: The Personnel Department, English National Board for Nursing, Midwifery and Health Visiting, Victory House, 170 Tottenham Court Road, London W1 – telephone 01-388 3131, extension 256.

Closing date for receipt of applications: Wednesday, 30th April 1986.

Interviews: midlater May 1986.

(74893)

UNIVERSITY OF OXFORD
Numerical Analysis Group

UCINA COORDINATOR

The University Consortium for Industrial Numerical Analysis (UCINA) is seeking a successor to Dr S. McKee who has been the Coordinator since UCINA's formation in 1979. Set up and initially funded by the SERC, UCINA has been fully self-supporting since 1984. Its aims are to make available to industry the numerical analysis expertise in universities and to make university teaching and research in the subject alive to the needs and priorities of industry. The Universities participating in the Consortium are Oxford, Bath, Brunel, Imperial College, Reading and Swansea.

The Coordinator visits industry and the universities and organises public meetings to identify worthwhile industrial problems and university staff who are prepared to contribute to their solution. The outcome may vary from a short consultation to a postdoctoral research project over several years. UCINA distributes reports on its work and organises one-day lecture programmes given at the sites of its industrial members.

Candidates should have had several years of research experience in numerical analysis and have a keen interest in industrial problems. The appointee will need to be a good organiser and communicator and will need to work closely with the Mathematical Modelling Group at Oxford. Participation in all of the Numerical Analysis Group's activities will be strongly encouraged, particularly in connection with the new Honour School of Engineering and Computing Science.

The appointment will be for five years on the University Research Staff salary scale IIX, in the range £12,280–£16,760 depending on age, qualifications and experience.

Further particulars from Prof. K. W. Morton, Computing Laboratory, Oxford OX1 3QD. Tel. Oxford (0865) 54141, ext. 315. Applications, including full curriculum vitae and naming two referees should be sent by 30th April.

(74859)

WEA ***Berks Bucks & Oxon***
WORKERS' EDUCATIONAL ASSOCIATION

This lively District of WEA wishes to appoint a

TUTOR ORGANISER

to cover Reading and West Berkshire. The appointment will take effect from 1st September 1986 or as soon as possible thereafter.

Candidates should have a strong belief in and understanding of liberal adult education as well as organisational experience. There should be a desire to extend learning opportunities to as wide a range of people as possible (for example, the unemployed and women). There should be a commitment to the WEA's Branch structure and a willingness to support and strengthen this. The person appointed will also contribute, as part of a team, towards the work of the District.

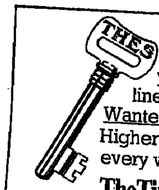
Candidates should normally possess the minimum of a good first degree or equivalent, although organisational ability will be of equal importance. Experience of adult education would be a distinct advantage.

Salary scale £7,389–£12,945.

For application forms, further information and particulars, please write to Linden West, District Secretary, WEA Berks Bucks & Oxon District, 9 Brewer Street, Oxford OX1 1QN.

Letters of application and application forms should be returned to District Office by 2nd May 1986. Interviews will take place in the week beginning 26th May 1986.

(74847)



THE KEY to successful home-hunting can be yours for just £2.58 per line in the Accommodation Wanted columns in The Times Higher Education Supplement every week.

The Times Higher Education Supplement

Research

University of Bristol
LONG ASHTON RESEARCH STATION
(Agricultural and Food Research Council Grant-Aided)

SOCIAL SCIENTIST
(Senior Scientific Officer)

AGRICULTURAL/BIOLOGICAL SCIENTIST
(Scientific Officer)

2-year appointments

Applications are invited for a Senior Scientific Officer (SSO) and a Scientific Officer (SO) to work on the first collaborative research project to be funded jointly by the Agricultural and Food Research Council and the Economic and Social Research Council.

The successful candidates, who will be based at Long Ashton Research Station, will conduct a pilot study, over 2 years, into how attitudes, technology and policies interact in influencing changes in the practice of crop protection in the UK. They will work together, the social scientist evaluating the organisational and policy environment and the agricultural/biological scientist the technical and scientific options for crop protection. They will interview a range of agricultural, industrial and environmental organisations in order to assess attitudes and policies towards current and future trends in crop protection practices and research.

Applicants for the SSO post should hold a 1st or upper 2nd class honours degree, preferably in social sciences. He/she should also have at least 4 years postgraduate research experience, preferably including a Ph.D. degree, in an appropriate area of the social sciences and with proven experience in interviewing and survey techniques.

The SO will assist the SSO and applicants should hold an honours degree or equivalent qualification in general agriculture, biology or environmental science and show a special interest in crop protection methods.

Candidates for both posts should be willing to travel within the UK.

The appointments, which are pensionable, will be on the scales £9,772–£12,653 per annum (SSO) and £6,190–£8,561 per annum (SO), nd will date from 1st September 1986.

Further particulars and application forms may be obtained from the Secretary, Long Ashton Research Station, Long Ashton, Bristol BS18 9AF. Closing date for receipt of applications is 30th April, 1986.

(74890)

Scientific Secretary (UK)

International Social Science Council
European Coordination Centre for Research and Documentation in Social Sciences
(Vienna Centre)

The Economic and Social Research Council invites applications to fill the above-named resident post in Vienna from 1st September 1986 to 31st October 1988. Salary will be on the Research Fellow Range 1A scale between £8,020 and £10,865 and will, in addition, attract a single person's overseas allowance of £2,490 p.a.

Candidates will need to demonstrate experience in scientific administration (or research coordination) and will be expected to have successfully completed postgraduate coordination) and will be expected to have successfully completed postgraduate research. Opportunities for continuing research exist, and preference will be given to candidates who possess experience of collaborative research and/or whose research is in one of the centre's main areas of interest. Speaking and/or reading knowledge of French and another language would be an advantage, but is not essential.

Application forms and further details are available from Stefan Czerniewski at the ESRC, 160 Great Portland Street, London W1N 6BA, on receipt of a large (10" x 8") stamped s.a.e. Closing date for receipt of applications: May 1st 1986.

(74889)

ESRC ECONOMIC AND SOCIAL RESEARCH COUNCIL

Overseas

South Australia

DIRECTOR OF MUSIC
Collegiate School of St. Peter (Anglican) in Adelaide

On the retirement of the present Director of Music, a Director of Music is required from February, 1987 for this College. (1,100 boys, day, boys and boarders 5-18 years).

There are well equipped music departments in both Junior and senior school with a large team of visiting teachers, in addition to the Assistant Director, Department Secretary and other music staff.

The school possesses two fine pipe organs, and preference may be given to an outstanding organist for leadership in weekday and Sunday services. In any case, musicianship of high quality is essential for this position.

The Director will be responsible for the continued organisation and further development of music in the school in areas such as Orchestra, Concert Band, Opera and Musical productions, Chapel Choir, School Choir, class teaching and other academic work and organisation of instrumental tuition.

Applicants are asked to forward relevant personal, academic and professional details, together with the names, addresses and telephone numbers of three referees. Recent references also would be useful. Accommodation is available and considerable help will be given with relocation.

Excellent superannuation scheme. Salary will be in excess of Aus$35,000.

The Headmaster, Dr A.J. Shinkfield, may interview in London during May, 1986. Applications (by airmail) addressed to: The Headmaster, Collegiate School of St. Peter, St. Peters, South Australia 5069, (54853) H14

NEW ZEALAND TECHNICAL INSTITUTE AND POLYTECHNICS TUTOR RECRUITMENT.

The New Zealand Technical Institute and Polytechnic system wishes to recruit professionally qualified tutors in the following disciplines

ELECTRONICS/
TELECOMMUNICATIONS
ACCOUNTANCY
ELECTRONIC DATA
PROCESSING AND SYSTEMS
COMMERICAL AIRLINE
PILOTS

Applicants must have 5 to 10 years of relevant commercial or industrial experience or appropriate tertiary qualifications. Previous teaching experience at tertiary level an added advantage.

Salary range NZDLR 25500 to NZDLR 35500 PA

Applicants should send full curriculum vitae to Box THES 1011, Times Higher Education Supplement, Priory House, St Johns Lane, London EC1M 4BX before 25th April.

Interviews will be arranged for suitable applicants in the first weeks of May in major metropolitan centres in the United Kingdom.

THE TIMES HIGHER EDUCATION SUPPLEMENT

THE N.S.W. INSTITUTE OF TECHNOLOGY
SYDNEY, AUSTRALIA

Equal Employment Opportunity is Institute Policy

PRINCIPAL LECTURER IN COMPUTER SYSTEMS ENGINEERING

The School of Electrical Engineering offers first and higher degree programs on a sandwich or part-time basis. The recently introduced course in Computer Systems Engineering is a major School initiative in response to the need for engineers with integrated software and hardware expertise. It strengthens existing commitments within the Faculty of Engineering to cooperative education.

Applications are invited for the new position of Principal Lecturer in Computer Systems Engineering. The appointee will exercise academic leadership within this emerging discipline and be responsible inter alia for the further development and implementation of the course. Close interaction with the School of Computing Sciences will be necessary.

Preference will be given to appropriately qualified applicants with relevant industrial experience and a demonstrated capacity for interdisciplinary co-operation. A well developed understanding of software engineering is essential while a knowledge of local industry would be advantageous.

Collaborative research, in fields such as software engineering, communication networks, industrial process control or microelectronic design, will be strongly encouraged.

Salary $A44,541.

Fares and contribution toward removal expenses are provided for overseas appointees. A Housing Loan Scheme is available plus opportunity exists to contribute to Superannuation. Approval may be given for undertaking limited consulting work.

An information sheet outlining duties and conditions relating to the positions is available from the address below.

Applications should include a detailed curriculum vitae and the names and addresses of three referees. In reply please quote reference No. 86/083 and forward by 16th May, 1986 to:

The Director,
N.S.W. Government Office,
66 Strand, London WC2N 5LZ.

Posts Overseas

East Europe

Lecturers in English

Bulgaria

Post 1: University of Sofia

Czechoslovakia

Post 2: Comenius University, Bratislava
Post 3: Charles University, Prague
Post 4: P J Safarick University, Presov
Post 5 Palacky University, Olomouc

Qualifications: candidates must be British nationals with a degree preferably in English or Modern Languages, a PGCE in TEFL (or an MA in Applied Linguistics) or equivalent, and a minimum of 3 years relevant teaching experience. An interest in Slavonic Studies is desirable for Bulgaria and a knowledge of Czech or German is desirable for Czechoslovakia. For all posts, preference will be given to single candidates.

Salary: local salary plus a sterling subsidy of £4,627 per annum.

Benefits: free or subsidised accommodation, medical scheme, superannuation contribution, fares and baggage allowance.

Contract: one year, from September 1986, guaranteed by the British Council, renewable.

Closing date for applications: 1 May 1986.

Reference: 86 B 1-5 TH

For further details and an application form, please write, quoting the post reference number, to: Overseas Educational Appointments Department, The British Council, 65 Davies Street, London W1Y 2AA.

The British Council

PLEASE MENTION THE **T.H.E.S.** when replying to advertisments

---

Overseas continued

KENYATTA UNIVERSITY

Applications are invited for the following posts:

PROFESSOR – Physical Education & Games Department – Ref: KAC/1/86/1

Applicants must be qualified Physical Educationists in possession of Ph.D degrees or equivalent and considerable teaching experience. They should also have been published in reputable journals. The successful applicant will be required to teach at both graduate and undergraduate levels, initiate plans for and supervise related research work in the department, and to supervise postgraduate projects.

PROFESSOR – Educational Foundations Department – Ref: KAC/1/86/2

Applicants must be educationists with considerable teaching and research experience at the University level, and must have considerable number of publications. They must be in possession of a Ph.D Ed Degree in either History or History of Education, Philosophy or Philosophy of Education, Sociology or Sociology of Education or Comparative Education. The successful candidates will be expected to help shoulder administrative responsibilities and provide guidance on research in the Department as well as teach at both undergraduate and postgraduate levels.

ASSOCIATE PROFESSOR – (PROJECT MANAGER) – Appropriate Technology Centre – Ref: KAC/1/86/3

The Appropriate Technology Centre is one of the youngest but rapidly expanding Departments at Kenyatta University. Its main objective is to encourage research and training programmes dealing with various aspects of appropriate technology.

Applicants to the post of Project Manager will be expected to supervise a team of technicians and postgraduate students, provide technical advice and assist other members of staff in designing and formulating research projects. Applicants should have a Ph.D or its equivalent in either Mechanical or Electrical Engineering or Applied Physics from a reputable University and should have several years of teaching and research experience at University level. Preference will be given to those with experience in the design of small scale equipment and structures.

SENIOR LECTURER – Physical Education & Games Department – Ref: KAC/1/86/4

Applicants must be qualified physical Education Teachers with PhD degrees in Physical Education or Sport, obtained from recognized Universities. The successful candidates will also have had several years teaching experience at University level. Candidates with masters degrees in the relevant area supported by research and publications will also be considered.

The successful applicants will be required to teach and supervise research projects at both graduate and undergraduate levels in the Department of Physical Education and Games.

SENIOR LECTURER – Educational Foundations Department – Ref: KAC/1/86/5

Applicants must be holders of Ph.D degrees in History, Philosophy, Sociology or Comparative Education, or, in these fields as they relate to education (History of Education, Philosophy of Education and Sociology of Education). Candidates must have experience in teaching and research at University level. Successful candidates will be expected to teach at postgraduate and undergraduate levels.

SENIOR LECTURER – Botany Department – Ref: KAC/3/86/11

Applicants should possess a Ph.D degree in any one of the following areas:

1. Microbiology/Virology
2. Development Biology
3. Plant Physiology
4. Plant Pathology/Virology
5. Mathematical applications in Botany (Biostatistics, Biometry, etc.)

Applicants should also have several years teaching experience at University level. Those with teaching experience in a teacher training College will have an added advantage. A good record of research and publications will be required. Successful candidates will teach at undergraduate and postgraduate level, supervise students' research projects, participate in teaching practice and will be expected to carry out their own research.

SENIOR LECTURER – Zoology Department – Ref: KAC/3/86/16

Applicants must have Ph.D in Zoology plus several years' teaching and research experience. Evidence of publications, with reputable publishers will be an advantage. Experience in a teacher training institution will be an added advantage. The successful candidate will be expected to teach undergraduates, supervise postgraduates and carry out his/her own research. Applications will be considered from persons specialising in any of the following areas in Zoology Department:

1. Physiology
2. Development Biology
3. Endocrinology
4. Terrestrial and Applied Ecology
5. Aquatic Biology
6. Entomology
7. Parasitology and Immunology
8. Mammalogy
9. Cytogenetics
10. Human Biology

LECTURER – Botany Department – Ref: KAC/3/86/13

Applicants should possess a Ph.D degree in any of the following areas:

1. Microbiology-Virology
2. Development Biology
3. Plant Physiology
4. Plant Pathology-Virology
5. Mathematical applications in Botany (Biostatistics, Biometry, etc.)

Successful candidates will be expected to teach at undergraduate and postgraduate level, to supervise, students research projects and to engage in their own research.

LECTURER – Zoology Department – Ref: KAC/3/86/17

Applicants should be holders of Ph.D degree and have some teaching experience at University level. Applications will be considered from persons specializing in any one of the areas

1. Development Biology
2. Aquatic Ecology (Freshwater and Marine Biology)
3. Ichthyology
4. Applied Ecology
5. Parasitology and Immunology

The successful candidates will be expected to teach undergraduate, postgraduate and do personal research and to participate in Departmental activities

LECTURER – Educational Foundations Department – Ref: KAC/3/86/12

Applicants should have a Ph.D in History, Philosophy, Sociology or Comparative Education or in these fields as they relate to education (History of Education, Philosophy of Education and Sociology of Education). Candidates will be expected to teach at both undergraduate and postgraduate levels

LECTURER – Chemistry Department – Ref: KAC/3/86/18

Applicants for this post must have at least a Ph.D in Organic, Physical or Inorganic Chemistry. The successful applicant will be expected to take part in the teaching of undergraduate and postgraduate students, to carry out research in their area of specialization and participate in Teaching Practice.

LECTURER – Mathematics Department – Ref: KAC/3/86/19

Applicants should be holders of Ph.D degree in applied or pure mathematics, statistics, computer science and/or operations research. Preference will be given to those who have carried out research and have had work published in reputable journals. In addition to teaching undergraduate students, the successful candidate will be expected to carry out research and guide graduate students in their research projects.

LECTURER – Physics Department – Ref: KAC/3/86/20

Applicants should have a Ph.D or its equivalent. Preference will be given to those with University teaching experience and who are capable of postgraduate teaching. Any area of research interest will be appropriate. The successful candidate will be expected to teach at undergraduate and postgraduate level and to conduct research.

LECTURER – Physical Education and Games Department – Ref: KAC/1/86/7

Applicants must be qualified Physical Educationists in possession of Ph.D degrees in Physical Education or Sports. Those with Masters degrees and considerable teaching experience will also be considered. The successful applicant will be expected to teach undergraduate courses in Physical Education, supervise students during Outward Bound Courses and participate in extra curricular programmes.

RESEARCH FELLOW – Bureau of Educational Research – Ref: KAC/1/86/8

Applicants should have a Ph.D degree or its equivalent in Education or social sciences and previous research experience in education. The successful candidates will be expected to design and undertake a series of studies in education in collaboration with other researchers in the Bureau. Experience in any of the following research areas will definitely be an advantage; learning efficiency; education and employment; imbalances in education opportunities; planning, management and administration; cost and finance; and language education. Successful candidate will be expected to teach undergraduate graduate courses in research methodology, advise students on research projects, lead research seminars and participate in other academic programmes organised by the University.

Terms of Service for all the above posts include membership of Senior Staff Superannuation Fund or PSSU and a non-contributory medical scheme, subsidised housing and/or a generous housing allowance.

Applications (6 copies) giving full details of age, marital status, educational qualifications, experience, present post, salary, copies of certificates and names and addresses of three academic referees should be addressed to: The University Secretary, Kenyatta University, P.O. Box 43844, NAIROBI, KENYA.

SALARY SCALES:	
PROFESSOR	– K£9,741 x KE210 – K£9,421 per annum
ASSOCIATE PROFESSOR	– K£8,681 – K£171 – K£9,144 x KE180 – K£7,944 x KE210 – K£7,854 per annum
SENIOR LECTURER	– K£4,325 x KE180 – K£4,791 x KE171 – K£6,169 per annum
LECTURER / RESEARCH FELLOW)	– K£2,199 x KE135 – K£4,368 x KE150 – K£4,782 x KE180 – K£4,962 per annum

Closing date for applications 2nd May 1986.

(74851)

Yarmouk University
The Languages Centre of Yarmouk University

Invites applications for the position of

LECTURER

for its Service English Programs.

Applicants must hold: 1. a B.A. in English or a Modern Languages. 2. an M.A. in TEFL or Applied Linguistics and must have a minimum of 1 year post-M.A. experience.

Salary: according to experience and qualifications.

The post includes a contractual load of 15 hours per week. Benefits include social security, health and life insurance.

Applications accompanied by copies of relevant academic certificates, transcripts, and at least two references should be addressed not later than April 10, 1986 to: Academic Staff Affairs Division, Yarmouk University, Irbid, Jordan. (54819) H14

Memorial University of Newfoundland
Department of Mathematics and Statistics

PROFESSOR OF STATISTICS

Applications are invited from suitably qualified Statisticians for the position of Professor of Statistics, effective September 1986, or as soon thereafter as possible, subject to the availability of funds.

The successful applicant will have outstanding achievement in research and teaching in Statistics and will be expected to provide strong leadership in the future development of Statistics programs in the department.

Applicants should submit a full vitae and the names of at least five referees to: Dr. Bruce Shawyer, Head, Department of Mathematics and Statistics, Memorial University of Newfoundland, St. John's, Newfoundland, Canada A1C 5S7.

In accordance with Canadian immigration requirements, this advertisement is directed in the first instance to Canadian citizens and permanent residents. (54805) H14

NATIONAL UNIVERSITY OF SINGAPORE
FACULTY OF ENGINEERING

Applications are invited for teaching appointments in the Departments of Mechanical and Production Engineering and Electrical Engineering.

Candidates must possess an appropriate PhD degree. Those applying for Senior Lectureships and above should possess considerable teaching and/or relevant industrial experience.

Preference will be given to candidates who have research/teaching experience in one or more of the following areas:

Department of Mechanical and Production Engineering	Department of Electrical Engineering
CAD/CAM	Computer Communications
Robotics	Computer Systems
Automatics	Image processing/computer vision
	IC Design

Gross annual emoluments range as follows:

Lecturer	S$28,300 – 58,680
Senior Lecturer	S$53,160 – 94,090
Associate Professor	S$82,430 – 113,530

(STG£1 = S$3.20 approximately)

The commencing salary will depend on the candidate's qualifications, experience and the level of appointment offered.

Leave, medical and provident fund benefits will be provided. Depending on the type of contract offered, other benefits may include: a settling-in allowance of S$1,000 (single) or S$2,000 (married), subsidised housing at nominal rentals ranging from S$100 to S$216 p.m., education allowance for up to three children, subject to a maximum of S$10,000 per annum per child, passage assistance and baggage allowance for the transportation of personal effects to Singapore. Staff members may undertake consultation work, subject to the approval of the University, and retain consultation fees up to a maximum of 66% of their gross annual emoluments in a calendar year.

Application forms and further information on terms and conditions of service may be obtained from:

The Director
Personnel Department
National University of Singapore
Kent Ridge
Singapore 0511

NUS Overseas Office
Singapore High Commission in London
5 Chesham Street
London SW1
U.K. Tel: 01-235 4562

(74863)

THE NEW SOUTH WALES INSTITUTE OF TECHNOLOGY
SYDNEY AUSTRALIA

Equal Employment Opportunity is Institute Policy

FACULTY OF BUSINESS
SCHOOL OF ACCOUNTING
DEPARTMENT OF BUSINESS LAW

SENIOR LECTURER
$A36,541/$A42,588 P.A.

Candidates should possess post graduate qualifications in law and/or commerce and should give evidence of teaching and research activities. Specialist knowledge in the areas of Taxation and/or Company Law would be an advantage.

The Department of Business Law services 30 law subjects which are offered within the Faculty at undergraduate and graduate level. Additional activities through Professional Extension Courses conducted under the auspices of the Department are encouraged.

Applications close on Friday 30th May, 1986.

CONDITIONS

Fares and contribution towards removal expenses are provided for overseas appointees. A Housing Loan scheme is available plus opportunity exists to contribute to Superannuation. Approval may be given for undertaking limited consulting work.

An information sheet outlining duties and conditions relating to the positions is available from the address below.

Applications should include a detailed curriculum vitae and the names and addresses of three referees. In reply please quote ref. no. 86/069 & forward to:

The Director,
NSW GOVERNMENT OFFICE,
66 Strand, LONDON WC2N 5LZ

Reminder

copy for Classified Advertisements in The T.H.E.S. should arrive not later than 10am. Monday preceding publication

---

EXECUTIVE DIRECTOR TESOL

TEACHERS OF ENGLISH TO SPEAKERS OF OTHER LANGUAGES (TESOL), an international not-for-profit association of 11,000 members, invites applications and nominations for the position of Executive Director. The Executive Director will be responsible for: implementing the policy of TESOL as developed and enunciated by the elected Executive Board and its committees, and advising the Executive Board on policy and financial matters; facilitating the Annual Convention and other meetings of the membership; collaborating with 62 affiliates in and outside the United States; linking with other regional national, and international agencies, organizations and institutions; and managing the TESOL Central office and supervising its staff.

Applicants should have: 1) experience in a leadership role in the teaching of ESL, EFL, or related area (international experience an advantage); 2) an advanced degree (doctorate preferred) in TESOL or related field; 3) managerial experience; 4) a willingness to travel within the U.S. and abroad; 5) fund raising experience.

The appointment is full-time. It is anticipated that the Central Office will continue to be located in the greater Washington D.C. metropolitan area. The starting date is July 1, 1987.

With letter of application and resume containing at least three references, please include a salary history and a 3-5 page statement of philosophy of leadership/management or related publication. Send by July 1, 1986, to:

TESOL Executive Director Search Committee
c/o John F. Fanselow
Box 66
Teachers College, Columbia University
New York, New York 10027, U.S.A.

Send nominations to the same address by June 1, 1986.

TESOL is an equal opportunity employer